HAWAII MEDICAL JOURNAL

and

INTER-ISLAND NURSES' BULLETIN

VOLUME 11 NOVEMBER-DECEMBER, 1951 NUMBER 2

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No doubt you would if you had practiced in 1876,
when Eli Lilly and Company had just begun
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Then, the prescription term *si non valeat*, meaning *if it does not avail*,
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was appropriate to most of that era's "remedies." Since then,
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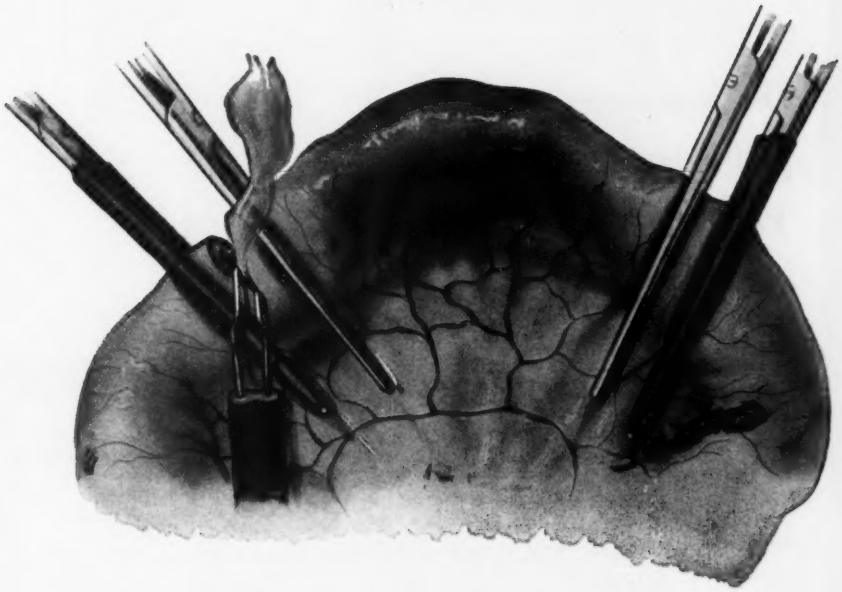

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DiCaprio, J. M., and Rantz, L. A.: Arch. Int. Med. 86:649 (Nov.) 1950.

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Hamblen, E. C.: North Carolina M. J. 7:533 (Oct.) 1946.

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*Perloff, W. H.: Am. J. Obst. & Gynec. 58:884 (Oct.) 1949.

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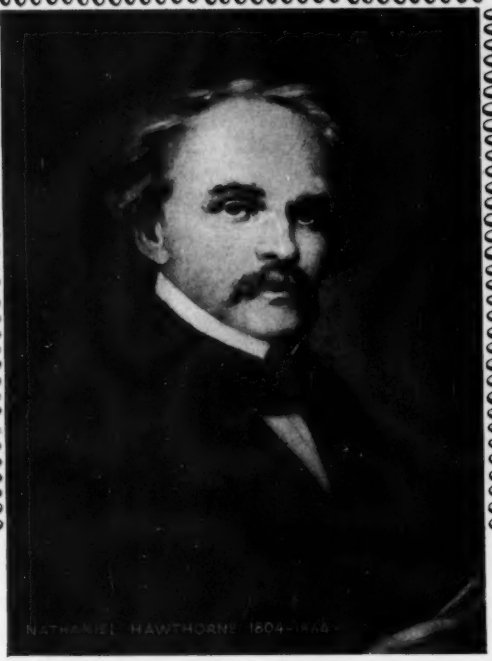

Psychoneurotics of Genius

Hawthorne, distinguished American novelist, is said to have been afflicted with a psychoneurosis from early childhood. His quiet life, wholly detached from the major activities of the times, was largely given over to brooding solitude.

The majority of psychoneurotics have no serious mental illness, but display merely an emotional imbalance which often can be greatly improved by appropriate psychotherapeutic and sedative management. In the treatment of psychoneurosis, particularly agitated, depressed and anxiety states, Mebaral is especially useful when tranquillity with minimal hypnotic action is desired. Sedative dose: Adults, from 32 mg. to 0.1 Gm. (½ to 1½ grains) three or four times daily. Children, from 16 to 32 mg. (¼ to ½ grain) three or four times daily. Supplied in tablets of 32 mg., 0.1 Gm. and 0.2 Gm.

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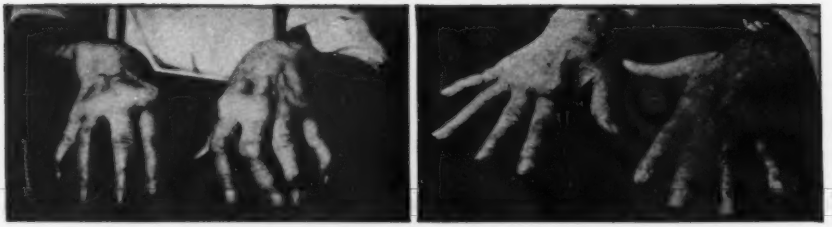
most effective and practical therapy in Rheumatoid Arthritis



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Literature on Request

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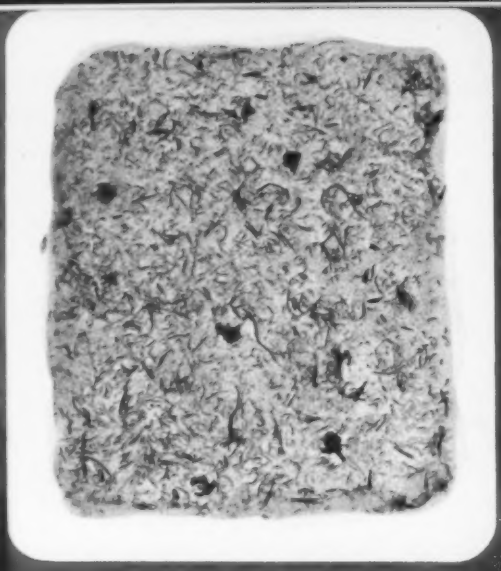

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You get no undigested knot or surface residue from Ethicon's exclusive Tru-Chromicizing

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The illustrations above are from kodachromes of glass plates containing residue from digestion experiments with surface-chromicized gut and Ethicon Tru-Chromicized Gut.

Loops of gut were tied around a glass tube and immersed in 1% trypsin solution for 200 hours, in which period the enzyme solution was renewed twice. The time of 200 hours is comparable to 6 months in tissue.

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In Ethicon's exclusive Tru-Chromicizing process, the individual ribbons of raw gut are chromicized before they are spun and dried. The chrome is evenly distributed and each portion of the strand, throughout the cross-section, has the same chrome content and enzyme resistance.

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The Importance of
PREVENTING BORDERLINE NUTRITIONAL STATES IN CHILDREN

IN recent years increasing interest has been focused on the relationship between nutrition and the physical, mental and emotional development of children. It is now well recognized that listlessness and apathy in the child frequently may be nothing other than manifestations of a borderline nutritional state resulting from faulty food selection and inadequate consumption. Moreover, such sequelae of faulty nutrition often respond dramatically to improved food habits.*

For preventing borderline nutritional states in children due to food whims, poor choice of foods, or lack of interest in eating, Ovaltine in milk enjoys long-established usefulness. Its rich content of biologically complete protein, vitamins and minerals can supplement even grossly deficient diets to optimal nutrition. The delicious flavor of Ovaltine invites its acceptance and lends interest to eating when the appetite lags. Children particularly like Chocolate Flavored Ovaltine.

Three servings of Ovaltine in milk furnish the supplementary amounts of nutrients shown in the appended table.

*Baumgartner, L.: Wider Horizons for Children; The Mid-century White House Conference and Children's Nutrition, J. Am. Dietet. A. 27:281 (Apr.) 1951.

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FAT	32 Gm.	VITAMIN B_1	1.16 mg.
CARBOHYDRATE	65 Gm.	RIBOFLAVIN	2.0 mg.
CALCIUM	1.12 Gm.	NIACIN	6.8 mg.
PHOSPHORUS	0.94 Gm.	VITAMIN C	30.0 mg.
IRON	12 mg.	VITAMIN D	417 I.U.
COPPER	0.5 mg.	CALORIES	676

*Based on average reported values for milk.

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Relationship of Stress to Autonomic Lability

Studies in psychosomatics have shown that functional disorders often are a result of the patient's inability to adjust to emotionally stressful situations (stressor factors).

Nervous tension and chronic anxiety, discharged through a labile Autonomic Nervous System, can cause somatic disturbance. [1,2] Such states may involve any one of the organ systems or several at one time. [1,3] The outline below is designed to relate gastrointestinal and cardiovascular symptomatology to the exaggerated response of the autonomic nervous system.

	Physiologic Effects of Autonomic Discharge	
	Sympathetic	Parasympathetic
Gastro-intestinal System	Hypomotility Intestinal Atony Hyposecretion Reduced salivation	Hypermotility Gastrointestinal spasm Hypersecretion
Cardio-vascular System	Rapid heart rate Peripheral vaso-constriction	Slow heart rate Vasodilatation
Functional Manifesta-tions	Palpitation Tachycardia Elevated blood pressure Dry mouth and throat	Heartburn Nausea-vomiting Low blood pressure Colonic spasm

The data here tabulated is from references 3,4,5,6,7, given below.

When the clinical picture is suggestive of functional disorder, the diagnosis is supported by the presence of the following indications of autonomic lability:

Variable Blood Pressure
Body Temperature Variations
Changing pulse rate
Deviations in B. M. R.
Exaggerated Cold Pressure Reflex
Oculo-Cardiac Reflex Abnormalities
Glucose Tolerance Alterations

Therapy in these cases is directed toward: 1) relieving the somatic disturbance to prepare the patient for psychotherapy*; 2) guidance in making adjustment to stressful situations and correction of unhealthy attitudes.

*Drug treatment using adrenergic and cholinergic blocking agents in conjunction with sedatives. [8,9,10]

1. Ebaugh, F.: Postgrad. Med. *4:* 208, 1948. 2. Wilbur, D.: J.A.M.A. *141:* 1199, 1949. 3. Williams, E. and Carmichael, C.: J. Nat'l. Med. Assoc. *42:* 32, 1950. 4. Goodman, L. and Gilman, A.: The Pharmacological Basis of Therapeutics, The Macmillan Co., 1941. 5. Katz, L. et al: Ann. Int. Med. *27:* 261, 1947. 6. Weiss, E. et al: Am. J. Psychiat. *107:* 264, 1950. 7. Alvarez, W.: Chicago Med. Soc. Bulletin, 581, 1950. 8. Rakoff, A.: A Course in Practical Therapeutics, Williams and Wilkins, 1948. 9. Karnosh, L. and Zucker, E.: A Handbook of Psychiatry, C. V. Mosby Co., 1945. 10. Harris, L.: Canad. M.A.J. *58:* 231, 1948.

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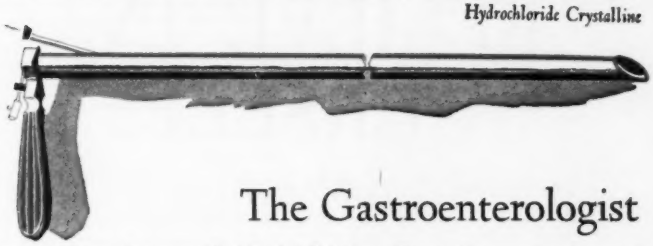

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recognizes the remarkable inhibiting effect of aureomycin on a great number of organisms, especially those commonly found in the gastrointestinal tract. It is of great value in the preparation of patients for surgery of the bowel or biliary tract, as well as in the medical management of infections in these areas. Aureomycin is also highly effective in intestinal amebiasis. Aureomycin is peculiarly adapted to the treatment of many biliary and hepatic infections, because of the high concentrations it attains in the bile and because of its protection of the hepatic parenchyma from bacterial necrosis. Aureomycin is indispensable in gastroenterology.

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Ophthalmic: Vials of 25 mg. with dropper; solution prepared by adding 5 cc. distilled water.

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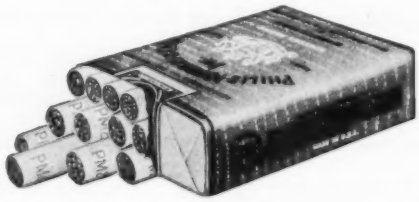

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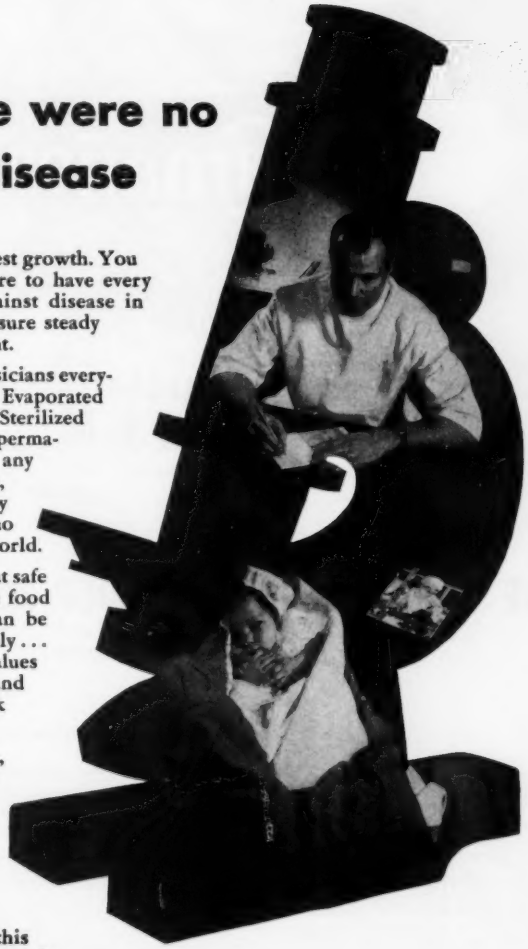

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Accidental Poisoning in Children

With Special Reference to Kerosene Poisoning

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THIS STUDY on accidental poisoning in children is the result of a review of cases admitted to the Kauikeolani Children's Hospital over a five year period from August 1945 to May 1950. The purpose of this study was to determine the most frequent types of poisoning so that an emergency room could be set up at the Children's Hospital to meet the most common needs. No attempt has been made to determine the best method for managing any one particular type of poisoning, because when the cases were admitted there was no unified study made with this in mind.

The cases presented are those that were admitted to the Children's Hospital, and do not necessarily reflect the most common types that may be seen in private practice or at the local Emergency Hospital.

Observations

The total number of cases admitted was 221 with 3 deaths, a mortality rate of 1.3%. The deaths were due to one each of the following: kerosene, oil of eucalyptus, and water color paint. The age range was from 10 days to 12 years with an average (median) age incidence of 3.8 years. The mode was 2 years: 40 cases occurred at this age, an incidence of 17.8%. The other ages in the order of frequency were: 1.5 years, 24 cases or 10.7%; 1 year, 20 cases or 8.9%; 3 years, 18 cases or 8.03%; 2.5 years, 17 cases or 7.6%. One hundred and forty-nine boys and 72 girls were admitted. There were 3 cases who ingested poisons twice. One was a 2½ year old female who ingested phenolphthalein in the form of "Ex-lax" twice 4 months apart. Another was a 3 year old male who was first admitted for ingestion of oil of eucalyptus and fourteen months later was admitted for kerosene ingestion. The third case was a 1 year old male who ingested kerosene twice five months apart.

There were 59 types of poisons encountered. To facilitate the discussion of the different types of poisoning, they have been divided into four major groups, namely, medications, chemicals, foods, and plants. The individual poisons encountered are as follows:

A. Medications
1. Oil of eucalyptus, 13 cases; phenolphthalein, 7 cases; barbiturates, 7 cases; salicylates, 6 cases; camphorated oil, 5 cases; rubbing alcohol, 4 cases; thyroid tablets, 3 cases.
2. There were two cases of each of the following: Benadryl; iodine; "Vapor Cresoline"; benzedrine; ethyl alcohol; aconite.
3. There was one case of each of the following: "Antistine"; potassium permanganate; stilbestrol; morphine; mercury; atropine; sulfonamide; mercurochrome.

B. Chemicals
1. Kerosene, 69 cases; arsenic, 17 cases; pine oil, 7 cases; turpentine, 4 cases.
2. There were three cases of each of the following: Cigarette lighter fluid; carbon tetrachloride; ant poison (unidentified).
3. There were two cases of each of the following: Phosphorus, gasoline, water color paint, nicotine, "Clorox," "Flit," lye, inhalation of "Chemtox" (termite fumigation fluid), creosol.
4. There was one case each of the following: Vanilla extract, witch hazel, creoline, "Tintex" dye, nail polish remover, incense sticks, D.D.T., shoe polish, "Borax," "trupine," denatured alcohol, lacquer thinner, camphor crystals, lead, weed poison (unidentified).

C. Foods (spoiled)
1. Butter fish, 7 cases; black sea bass, 1 case; cream puff, 1 case; corned beef, 1 case.

D. Plants
1. Berries (unidentified), 2 cases; nuts (unidentified), 3 cases; fruit (unidentified), 1 case; Dieffenbachia (dumb cane), 1 case.

The most common general treatment employed for the ingested poisons was gastric lavage. Out of the 221 cases admitted, 167 were so treated. Thirteen had vomited prior to the lavage, and of these, it was induced in 7 by home remedies of milk, egg and milk, egg white, or mustard water. Ten were given emetics at home with no success. Most of the cases were treated by the Emergency Hospital before being admitted to the Children's Hospital.

On reviewing the cases, it was found that in

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most instances, the exact amount of ingested poisons was unknown. The time interval before the patient was seen was usually from one-half hour to one hour. The following is a discussion of the more commonly encountered poisons:

Commonest Poisons

Of the 13 cases of *oil of eucalyptus* ingestion, in 5 it was given as cough medicine by mistake. The most common symptom reported was convulsion, which occurred in 6 cases. Respiratory depression occured in 3 cases; in 5, no common signs or symptoms were recorded. The symptoms appeared to be related not to the amount ingested but to how soon after ingestion therapy was started. It was noted that those treated within one-half hour presented no unusual findings. The treatment was mainly lavage. The one fatal case of oil of eucalyptus ingestion occurred in an 8 month old infant who was said to have ingested 1 ounce and was not treated till two hours later. On admission, the child was cyanotic, convulsing, and comatosed. The temperature was elevated and he died nine and one-half hours after admission without regaining consciousness. The essential findings at autopsy were "hydrothorax, hydroperitoneum, and acute hemorrhagic peritonitis."

Of the 7 cases of *phenolphthalein* ingestion, 5 were due to "Ex-lax" and 2 to "Feen-a-mint." The symptoms were confined to mild diarrhea. Treatments consisted of lavage and, in only 1 case, kaopectate and paregoric.

The 7 cases of *barbiturate* ingestion showed drowsiness as the most common symptom. Five were treated by lavage, one case was given caffeine, and one other was given benzedrine.

Of the 6 cases of *salicylate* poisoning, 2 were due to oil of wintergreen, and 4 to aspirin. The 2 cases of oil of wintergreen poisoning showed signs of acidosis on admission and were treated with glucose water and lactate solution parenterally. The one other case showing signs of acidosis on admission gave a history of ingesting 5 grains of aspirin once or twice every hour for one week, through a mistake in following directions. He had a salicylate level of 21.7 mg% on admission.

Of the 5 cases of *camphorated oil* poisoning, only one showed signs of intoxication. The child convulsed shortly after ingestion of the poison and had two more convulsions after admission to the hospital. She was treated by lavage only and given sulfadiazine for an associated nasopharyngitis. The next day she was free of symptoms.

Thirteen of the 17 cases of *arsenic* ingestion were due to cockroach powder and paste containing lead arsenate as the main ingredient. One other was due to rat poison and the three others occurred simultaneously in siblings who drank a garden spray solution containing an arsenic compound. The exact amount ingested and whether the poison was actually swallowed could not be determined with certainty in all the cases. Only those three siblings who drank the garden spray solution showed toxic effects. They complained of vomiting and abdominal pains and were treated with BAL.

There were 7 cases of *pine oil* ingestion. Spiking fever a few hours after ingestion and lasting for about twelve hours was reported in 4 cases. One case had hyperemia and swelling of the mucous membrane of the oropharynx and signs of croup. Every case was treated by gastric lavage.

Three of the 4 cases of *turpentine* ingestion developed abnormal signs and symptoms, including fever of short duration. One of them had pneumonia, which was confirmed by x-ray. The other had convulsions, became cyanosed, and had urinary retention. He also developed polymorphonuclear leukocytosis.

Two of the 3 cases of *cigarette lighter fluid* ingestion developed fever for three days. One of the cases also showed lethargy and had findings of pneumonia both by physical examination and x-ray. Blood counts on this patient taken on admission and two days later were normal. Four days after admission, he had an anemia of 2.9 million red cells and 9 gram of hemoglobin which responded favorably to blood transfusion.

Two of the 3 cases of *carbon tetrachloride* ingestion had fever and leukocytosis on admission. One of them became extremely ill with jaundice and anemia of 1.11 million red cells, 19% hemoglobin, 21% nucleated red cells, and 59,000 leucocytes. The urine showed 3+ albumin and was normal six days later. The anemia was corrected with two blood transfusions. There was no record of any liver function tests.

Of the 7 cases of poisoning due to spoilage of butter fish, 5 involved children who were at the same party. The outstanding symptoms were nausea, vomiting, and diarrhea. No specific treatment was employed. The 2 other cases were siblings who had similar symptoms and were admitted a day before the other five. The other cases of food poisoning due to spoilage all had similar symptoms of nausea, vomiting, and diarrhea.

The fatal case of *water color paint* ingestion involved a 17 month old girl who ingested an unknown quantity of yellow, green, and blue water color paint. She was admitted to the hospital eight hours later in a semicomatose condition, having rapid and shallow respirations, vomiting, and

bloody diarrhea. She was treated with parenteral fluids but failed to respond and died five hours later following an attack of convulsions. The only significant finding from the coroner's report was acute pulmonary edema. The one other case of water color paint ingestion showed no unusual symptoms. He was lavaged within an hour after ingestion of the water color paint.

Less Common Poisons

It might be of interest to mention briefly some of the outstanding findings of the other cases of poisoning that were less frequently encountered.

One of the cases of *iodine* poisoning had a mild burn of the lip. The 2 cases of *benzedrine* poisoning showed hyperexcitability which was controlled with barbiturates. Whiskey and beer accounted for the 2 cases of *ethyl alcohol* poisoning. Inebriation was the presenting symptom. Two of the 4 cases of *rubbing alcohol* poisoning were drowsy, flushed, and had fever. One of them ingested the alcohol, and the other had the alcohol given as an enema by accident. One of the patients who had no symptoms was a 10 day old infant who had the alcohol poured into his mouth by an older sibling. The 1 case of *morphine* poisoning received ½ grain by accident and became extremely drowsy. The case of *sulfonamide* poisoning developed urinary obstruction from precipitation of the sulfonamide crystals in the urethra. He was successfully treated by catherization.

One of the cases of *ant poison* ingestion had a temperature elevation of 102° for eight hours. The 2 cases of *gasoline* ingestion had temperature elevations. One of them had transient rales in the chest. One of the cases of *nicotine* ingestion was admitted in a collapsed condition. He was successfully treated by gastric lavage. Both cases of *"Clorox"* ingestion had second degree burns of the oropharynx. No systemic effect was noted. One of the cases of *"Flit"* ingestion was admitted in a shocked condition with heavy grunting respirations. The other case had no systemic effects but experienced coughing and choking. Only one of the cases of *lye* ingestion was reported to have burns of the oropharynx with febrile reaction. No further complication developed. The two siblings who were involved in the termite fumigating fumes (*Chemtox*) had fever, wheezing, labored respirations, and polymorphonuclear leukocytosis. Inebriation was the only symptom noted with the *vanilla extract* ingestion. The child who ingested the *nail polish remover* was said to have had difficulty in breathing immediately after the accident but had no unusual symptoms when seen at the hospital an hour later. Cyanosis of the nail beds and slight temperature elevation resulted from the ingestion of unknown quantities of *shoe polish*. The patient was lavaged on admission and on discharge two days later was entirely well. The child ingesting the *"Borax"* complained of a stomach ache but was symptom free after the gastric lavage. The case of *lead* poisoning occurred in a 1½ year old boy who gave a history of ingesting paint over a period of time. He was admitted because of convulsions. X-rays showed deposition of heavy metal at the ends of long bones. Sodium luminal was used for controlling the convulsions. No specific deleading procedure was carried out.

One of the cases of *berry* poisoning had nausea and vomiting on admission but was not severely ill. The cases of *nut* poisoning involved 2 brothers and a friend. They all had vomiting and diarrhea immediately after ingesting the nuts. The case of *fruit* poisoning had nausea and vomiting. The case of *dieffenbachia* poisoning had abdominal pains only.

The cases not discussed presented no abnormal signs and symptoms. This in itself does not mean that the poisons were harmless. Many factors are responsible for this, such as, the small amounts taken, the poisons not being actually swallowed, and the early institution of treatment, mainly, gastric lavage.

Kerosene Poisoning

There were 69 cases of kerosene ingestion, an incidence of 31.3%. The age range was from 11 months to 8 years with an average age of 21 months. The mode was 2 years—14 cases occurred at this age group, an incidence of 20.3%. The other ages in the order of frequency were: 1.5 years, 13 cases or 18.8%; 1 year, 11 cases or 15.9%. There were only two children over 3 years of age, a 4 year old and an 8 year old. The age incidence emphasizes the fact that children at the "age of exploring" are the ones most likely to get into trouble. In most instances, the accident occurred when the kerosene was kept carelessly in open cans, soda pop bottles, or containers with leaking spigots. The exact amount of kerosene ingested could not be determined accurately in most instances; estimates varied from a sip to a mouthful.

Gastric lavage was employed in 62 of the 69 cases. Three had spontaneous vomiting prior to admission and in four others there was no record of either lavage or vomiting. Sixteen patients received penicillin for prophylaxis and for treatment of pneumonia; one received sulfonamide alone, and two patients received both penicillin

and sulfonamide. Plain water was used for gastric lavage in 54 cases and the other 8 were lavaged with sodium bicarbonate solution. In 12 cases, the gastric lavage was followed by the instillation of some medication — 8 received milk of magnesia, 2 each received mineral oil and plain milk, and 1 each received olive oil and magnesium sulfate.

The most frequent complications are as listed in Table 1. An attempt has been made to group them into cases who were lavaged and those who were not. Because of the insufficient number of cases in the group not lavaged, no conclusions can be drawn from this study as to the frequency of complications between those who were lavaged and those who were not. There were 12 cases (17.3%) who presented no symptoms, and these were all in the group of cases who were lavaged.

TABLE 1.—*Complications from Kerosene Poisoning.*

COMPLICATIONS	TOTAL NO.	PERCENT OF TOTAL (69)	LAVAGED (TOTAL 62) NO.	LAVAGED (TOTAL 62) %	NOT LAVAGED (TOTAL 7) NO.	NOT LAVAGED (TOTAL 7) %
1. Fever	52	75.3	44	70.9	7	100.0
2. Coughing & Choking	15	21.7	11	17.7	4	57.0
3. Pneumonia	13	18.8	10	16.1	3	42.8
4. Vomiting	10	14.4	10	16.1	....	....
5. Lethargy	9	13.0	9	14.5	....	....
6. Elevated WBC & Polys	6	8.6	5	8.0	1	14.3
7. Death	1	1.4~	1	1.6	....	....

The fever was observed usually after the child had been in the hospital from four to eight hours and was of short duration, lasting twelve to twenty-four hours. The temperature varied from 101° to 104°. Those cases with pneumonia had longer duration of fever lasting from three to five days.

The coughing and choking recorded were those observed at the time of hospitalization. More detailed histories might have revealed these symptoms to be prevalent in the other cases also.

In 9 instances, the pneumonia was confirmed by x-rays, which showed a peribronchial infiltration in the lower lobes. The physical findings recorded were slight impairment to percussion and moist rales over the involved areas.

Most of the cases of vomiting occurred spontaneously after ingestion of the kerosene, though some were induced at home with emetics.

The lethargy ranged from drowsiness of short duration to unconsciousness of two to four hours' duration. One case was reported as being semi-comatose for eight hours.

Every case had a routine CBC on admission. Only 6 showed an elevated white count, ranging from 15,000 to 33,000 neutrophiles ranging from 52 to 76%. Only 1 case developed anemia which occurred six days after the ingestion of kerosene and responded well to blood transfusion.

The one fatal case of kerosene ingestion occurred in a 1½ year old child. The exact amount ingested was not known. She was lavaged at the Emergency Hospital about an hour after the onset of the accident and on admission to the Children's Hospital, the child was unconscious and gasping for breath. She expired forty minutes after admission.

Discussion

It is beyond the scope of this paper to discuss all the different types of poisoning as each type would deserve a full paper discussion. The reader is referred to the excellent discussion of this subject by Dr. J. M. Arena in the *Ciba Clinical Symposia*.[1] However, since kerosene was the most common one encountered, a brief review of the literature on kerosene poisoning may be in order.

The subject of pulmonary manifestations following kerosene ingestion is always of considerable interest. Pneumonia occurs more frequently than we are led to believe. Lesser et al.[2] x-rayed 22 patients following kerosene ingestion and found 77% had signs of pneumonia. Of these, only 24.2% showed physical signs which appeared about four hours after ingestion. Reed et al.[3] followed 19 cases of pneumonia due to kerosene for six months to four years. They found no evidence of residual damage to the respiratory systems. The pulmonary changes resolved in two weeks. The cases at the Kauikeolani Children's Hospital were not x-rayed routinely, hence, the incidence of pneumonia may have been higher than 18.8%.

The institution of gastric lavage as treatment in kerosene ingestion is controversial. The issue is about the mode of developing pneumonia. Lesser et al.[2], Waring[4], and Reed et al.[3] have shown by experiments with rabbits that pneumonia is caused by direct aspiration of kerosene into the lungs and that no pneumonia was observed when kerosene was instilled directly into the stomach. Rabbits were used in the experiment because they do not vomit. Deichmann et al.[5], on the other hand, have shown that pulmonary changes can occur without direct aspiration of kerosene into the pulmonary system. When kerosene is introduced directly into the stomach, pulmonary changes can occur from absorption into the blood stream.[5]

In the above experiments, all mentioned that drowsiness occurred when large amounts of kero-

[1] Arena, J. M.: Accidental Poisoning in Children, *Ciba Clinical Symposia*. Vol. 3, No. 3, April-May '51.
[2] Lesser, L. I., Weens, H. S., McKey, J. D.: Pulmonary Manifestations following Ingestion of Kerosene, *J. Pediat.* 23:352 (Sept.) 1943.
[3] Reed, E. S., Leikin, S., and Kerman, H. D.: Kerosene Intoxication, *Am. J. Dis. Child.* 79:623 (Apr.) 1950.
[4] Waring, J. I.: Pneumonia in Kerosene Poisoning, *Am. J. Med. Sci.* 185:325 (Mar.) 1933.
[5] Deichmann, W. B., Kitzmiller, K. V., Wintherup, S., and Johansmann, R.: *Ann. Int. Med.* 21:803 (Nov.) 1944.

sene were instilled into the stomach. Degenerative changes in the liver, kidneys, lungs, and heart have also been described.[5] At a recent clinical conference at the St. Louis Children's Hospital[6], the occurrence of mediastinal and subcutaneous emphysema and pneumothorax in kerosene poisoning have been pointed out as not being unusual.

The observations made on the complications of kerosene poisoning in this study are similar to those made by others. Leukocytosis is the only exception. While this study reported an incidence of 8.6%, Reed et al.[3] report leukocytosis in 65% of their cases.

Lead Poisoning

Because lead poisoning in children is unlike that in adults, brief mention will be made of another case of lead poisoning which occurred after this study was completed. The case was that of a 2 year old girl admitted because of an acute onset of convulsions not associated with fever. A careful history revealed the fact that the child had been eating paint off the wall over a period of 2 months. A flat x-ray of the abdomen showed scattered dense shadows in the shape of paint peelings. Blood level for lead was 0.8 mg%.

Increased intracranial pressure and cerebral edema are the outstanding features of lead poisoning in children. Therefore, it is hazardous to do lumbar punctures on patients with acute lead encephalopathy. In the chapter on lead poisoning in Mitchell and Nelson's *Textbook of Pediatrics*[7] it is stated that approximately one-half of the infants and small children have encephalitic manifestations and among these the mortality is about 25%. Of those who recover, about one-third are left with permanent neurologic sequels. Encephalitis with convulsions may be precipitated in a quiescent case by the release of the lead from the bones during an intercurrent acute infectious or metabolic disturbance. Because of the permanent residual effects that may develop from lead poisoning, the public should be educated to use lead-free paint in all house interiors and toys.

General Measures

At the Conference on Poisoning at the Duke Hospital[8] in 1947, it was said that 400 different types of poisons kill over 500 children in America annually. Caustic alkali poisoning was said to be the most frequent, followed by kerosene. It was emphasized that many of the cases of poisoning were preventable and the responsibility is with the parents. They suggested the following emergency measures in handling acute poisonings.

1. Identify the poison as soon as possible.
2. Evacuation of the poison from the stomach by lavage or emetic except in cases of kerosene and caustic alkali poison.
3. Antidoting the residual poison in the stomach when possible.
4. Antagonist when available.
5. Symptomatic treatment when indicated.
6. When the nature of the poison is unknown, give universal antidote of: pulverized charcoal 2 parts, tannic acid 1 part, magnesium oxide 1 part. The pulverized charcoal may be given in the form of burnt toast, the tannic acid in the form of strong tea, and the magnesium oxide in the form of milk of magnesia. The first will absorb phenol and strychnine, the second will precipitate alkaloids, glucosides and metals, and the last will neutralize acids.

Summary

A study of 221 cases of accidental poisoning admitted to the Kauikeolani Children's Hospital over a 5 year period is presented.

Fifty-nine different poisons were encountered.

There were twice as many boys as girls admitted.

The age of greatest frequency was 2 years, followed by the age groups of 1½ years, 1 year, 3 years, and 2½ years.

Kerosene poisoning is the most common, and 69 cases of kerosene poisoning are presented in detail with a brief discussion of the literature.

Other more common types of poison are: arsenic compounds, oil of eucalyptus, phenolphthalein, barbiturates, pine oil, salicylates, and camphorated oil.

There were 3 deaths, due to one each of the following: kerosene, water color paint, and oil of eucalyptus.

Conclusions

This study probably does not give a complete picture of the most common poisons encountered in the Hawaiian Islands. In order to have this study complete, further information should be obtained from the practicing physicians and the cases of poisoning admitted to the Emergency Hospital should be reviewed.

There are, however, two important points this study emphasizes:

1. Many of the cases of accidental poisoning are preventable.
2. We must never underestimate the 18 month to 3 year old child's knack for getting into trouble, and we recognize his natural curiosity for exploring the unknown through his mouth.

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[6] Clinical Conference at the St. Louis Children's Hospital, "Mediastinal Emphysema, Pneumothorax, and Subcutaneous Emphysema Complicating Kerosene Poisoning", *J. Pediat.* 38:646 (May) 1951.
[7] Mitchell, A. G., and Nelson, W. E.: *Textbook of Pediatrics*, ed. 4, Phila., W. B. Saunders Co., 1945.
[8] Clinic on Poisoning, Conference at Duke Hospital, *J. Pediat.* 32:207 (Feb.) 1948.

Some Common Arrhythmias and Their Treatment with Lanatoside C (Cedilanid)

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AURICULAR flutter and fibrillation are most often seen in organic heart disease, commonly in rheumatic heart disease. They are likewise seen in thyrotoxicosis, hypertensive heart disease and coronary artery disease associated with arteriosclerotic heart disease.

We have relied in the past, for controlling cardiac arrhythmias, largely upon such drugs as quinidine, procaine, magnesium sulphate, potassium chloride, atropine sulphate, papaverine, morphine and acetylcholine, etc. While these drugs are certainly useful, they are frequently ineffective and possess other disadvantages. They sometimes produce side effects such as tinnitus, nausea, vomiting, diarrhea, syncope, ventricular fibrillation, ventricular tachycardia, respiratory failure and cardiac arrest. The ideal drug, which will give the effect desired, must have the following properties: a short latency period and a quick onset of action, a rapid elimination and therefore no danger of accumulation, free from side effects and a wide therapeutic range. Such properties are found in Cedilanid* (Lanatoside C), a chemically pure cardiac glycoside from Digitalis lanata.

Rothlin[1] found that the weak fixation to serum albumin of Cedilanid and the strophanthus glycosides, explains their comparatively short latent period. Stead, Warren and Brannon[2] observed that after administration of 0.8 to 1.6 mg. of Cedilanid, cardiac output begins to increase within ten minutes. Tandowsky, Anderson and Vandeventer[3] reported that simultaneously, ECG changes follow and according to LaDue and Fahr[4], Kroetz[5], and Stead, Warren and Brannon[2], the venous pressure begins to fall after about fifteen minutes and the heart decreases in size within thirty minutes to two hours. Rothlin[6] and his coworkers have shown in animals that the fixation by organs varies with the glycosides used and determines the degree of versibility of their action on one hand and their storage and toxic cumulation on the other; also that digitoxin has the highest fixation power with a decrease in sequence from Digilanid (complex glycosides of Digitalis lanata) over Cedilanid and Scillaren A to the Strophanthus glycosides. Similar differences in fixation power and reversibility apply to the human heart. 12.7% of the lethal dose (constant infusion method Hatcher-Brodie) of digitoxin can be given approximately 9.5 times to the cat before death occurs. On the other hand, 18% of the lethal dose of Cedilanid will kill only after 13 injections have been given. The total lethal dose in the experiment with digitoxin is therefore 1.2 times higher than the Hatcher-dose, whereas Cedilanid requires 2.3 times the Hatcher-dose to kill the animal. From this it may be seen that Cedilanid has a low toxicity, shows a wide therapeutic margin and that moderately large doses are decidedly less toxic than digitoxin. Diefenbach and Meneely[7], DeGraff, Batterman and Rose[8], Flaxman[9], Moody[10] and Levine[11] reported toxicity in humans from digitoxin.

I would like to present a few cases of cardiac arrhythmias in which Cedilanid (Lanatoside C) has been employed. Our findings and results are

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[12] Levine, H.: Abnormal Rapid Rhythms Associated with Digitoxin, Ann. Int. Med. 29:822 (Nov.) 1948.

based upon careful clinical observations and electrocardiographic findings. Cedilanid (Lanatoside C) has been extensively tested both experimentally and clinically and numerous observers have extolled the properties of Cedilanid, especially when given intravenously. We likewise found that the pulse deficit in cases of auricular fibrillation greatly improves in remarkably short periods, and that the ventricular rate in auricular fibrillation slowed down with considerable speed in comparison to other digitalis preparations such as digitoxin which we have used in the past. For the sake of brevity, and to avoid repetition, all the references are not quoted because this has been done in many previous publications, especially in an excellent monograph on digitalis by Movitt[13].

Case Histories

CASE 1.—A 27 year old man who fell and received a 2½" laceration of his left temple was brought to the hospital fibrillating as shown in Fig. 1. Following the suturing of his laceration, he was given 1.6 mg. Cedilanid intravenously at 4:00 p.m. The following morning normal sinus (Fig. 2) rhythm had been restored and no further medication was given. A week later, no arrhythmia was found. Patient seen one month later with normal sinus rhythm.

CASE 2.—A Japanese woman, age 48, gave a history of having a weak heart since childhood. She had repeated bouts of this same kind of "heart attack." Physical findings were negative, except an extremely fast heart rate. She stated that "my heart has been acting up this way for the past week." An electrocardiogram was taken (Fig. 3) at 2:30 P.M. and 4 cc. of Cedilanid was given intravenously. Patient was seen at 2:15 P.M. next day and a second ECG was taken (Fig. 4). The first ECG shows auricular tachycardia with a rate of 166, the second ECG shows a normal sinus rhythm with a rate of 60. The patient stated that her heart had quieted down around 6:00 P.M., three and one-half hours following the injection. Had this patient been a hospital case, a larger dose of the drug would have been given and the reversion to normal sinus rhythm no doubt would have been much earlier.

CASE 3.—A 46 year old white man. History of two previous attacks of "my heart pounding and fluttering." Patient had a sub-total gastrectomy three years before. First "heart attack" six months ago following over indulgence in alcohol. Patient was seen at 10:30 A.M. with physical findings essentially negative except the heart was fibrillating (Fig. 11). Six cc. of Cedilanid

[13] Movitt, Eli R.: Digitalis and Other Cardiotonic Drugs, Second Edition, Oxford University Press 1949.

Fig. 1 (Case 1). Lead 2 showing auricular fibrillation.

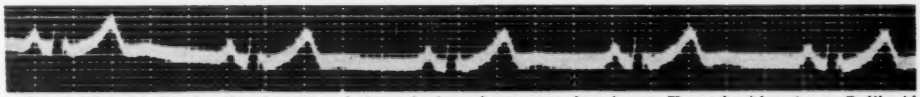

Fig. 2 (Case 1). Lead 2 showing normal sinus rhythm after twenty-four hours. Treated with 1.6 mg. Cedilanid intravenously.

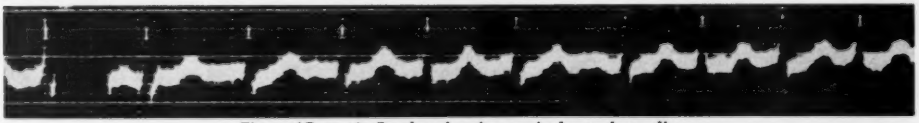

Fig. 3 (Case 2). Lead 2 showing auricular tachycardia.

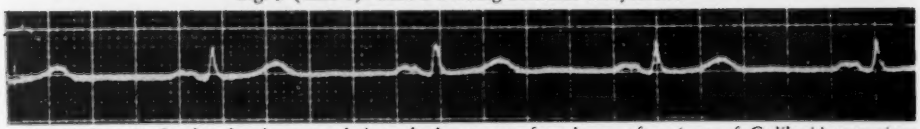

Fig. 4 (Case 2). Lead 2 showing normal sinus rhythm twenty-four hours after 4 cc. of Cedilanid was given intravenously.

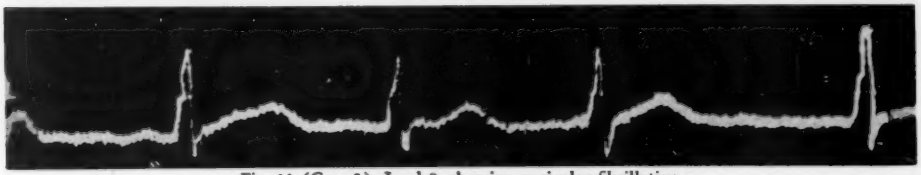

Fig. 11 (Case 3). Lead 2, showing auricular fibrillation.

was given intravenously. Five minutes later the pulse and ventricular rate were 78. Patient was seen the following morning when a second ECG was taken (Fig. 12) showing normal sinus rhythm.

CASE 4.—This was the third hospital admission of a 45 year old Hawaiian woman in acute congestive heart failure. She presented a four plus edema of the lower extremities, together with rales in both bases of the lungs. The heart was fibrillating (Fig. 5). The patient was not cooperative as to taking her digitalis preparation at home and we had no idea when the last dose was taken. She was given mercurial diuretics for one week and then digitalized with 1.6 mgm. of Cedilanid. The following day a second electrocardiogram was taken (Fig. 6). Although the fibrillation was not broken, the general appearance of the electrocardiogram was better, as well as a slowing and a more regular ventricular rate. Patient was discharged from the hospital after one month and compensated on a maintenance dose of 0.333 mgm. Digilanid (chemically pure complex glycosides of Digitalis lanata, Lanatosides A, B and C) daily.

CASE 5.—A 16 year old Japanese woman who noticed her "heart skipping." The physical examination was essentially negative with the exception of the premature ventricular contractions. An electrocardiogram was taken (Fig. 7). One ampul (4 cc. Cedilanid) was given intravenously; twenty-four hours later she had resorted to normal sinus rhythm (Fig. 8). This patient has been apparently well since.

CASE 6.—A 46 year old rather obese Japanese woman was seen by another physician in his office and he noted a very rapid heart rate. The patient had been seen and was being treated for symptoms of menopause. The patient was sent to the hospital and referred for consultation and physical findings were essentially negative. An

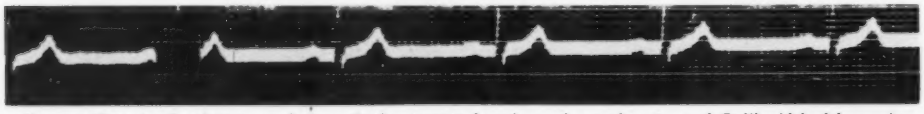

Fig. 12 (Case 3). Lead 2: normal sinus rhythm twenty-four hours later after 6 cc. of Cedilanid had been given intravenously.

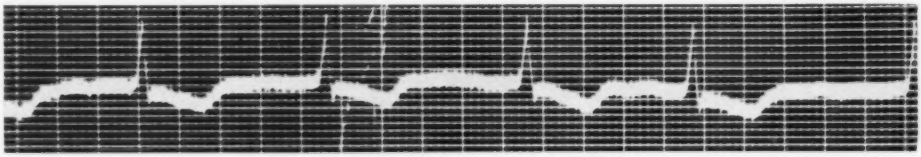

Fig. 5 (Case 4). Lead 2: auricular fibrillation.

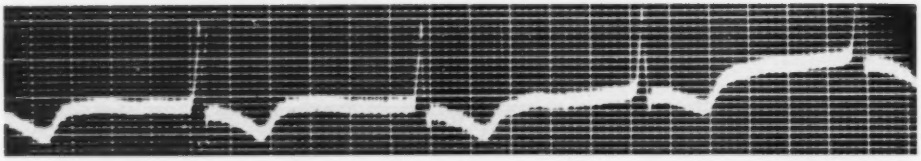

Fig. 6 (Case 4). Lead 2, twenty-four hours after 1.6 mg. of Cedilanid given intravenously. Still auricular fibrillation but a slower ventricular rate.

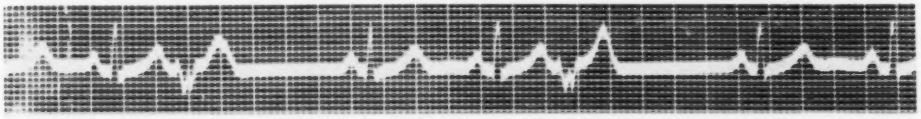

Fig. 7 (Case 5). Lead 2, showing premature ventricular contractions.

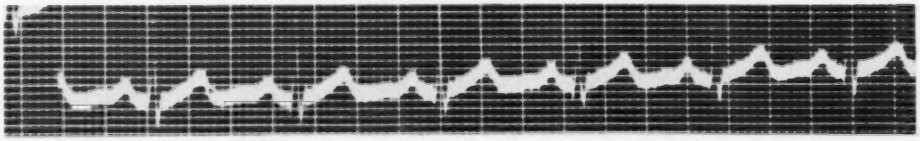

Fig. 8 (Case 5). Lead 2, showing normal sinus rhythm twenty-four hours after 4 cc. Cedilanid given intravenously.

electrocardiogram was taken (Fig. 9), and shows auricular fibrillation. Following the administration of 0.8 mgm. (4 cc.) of Cedilanid, the rhythm reverted to normal sinus rhythm within four hours (Fig. 10). The patient was maintained on 0.333 mgm. of Digilanid daily for three weeks and upon discharge, the heart and pulse rate averaged 76 beats per minute. Patient was taken off all medication except therapy for her menopause, and when seen one month later, she still was maintaining her normal sinus rhythm.

CASE 7.—Since the presentation of this paper, another case came under my care, a 9 year old Japanese boy. I catheterized his heart on February 13 of this year. Various laboratory tests were done and the electrocardiogram showed a normal sinus rhythm, with marked right axis deviation. During the catheterization, a direct writer was used with no change in the rhythm or rate. A diagnosis of Tetralogy of Fallot was made. The patient was posted for a Blalock-Taussig procedure March 26, 1951. On this morning a direct writer electrocardiograph was attached to the patient, as in all types of this surgery, and with the induction of intratracheal cyclopropane anesthesia, the tracings were begun. The first reading (Fig. 12) shows a very aberrant rhythm. Four cc. of Cedilanid was given intravenously through the tubing which contained the plasma-blood which was introduced into one of the foot veins. Ten to fifteen minutes later (Fig. 12) normal sinus rhythm had been restored. Surgery was then started and at five to ten minute intervals electrocardiograms were made as shown in the accompanying tracings (Fig. 13). Throughout the operation the average ventricular rate was 166. At 1:00 P.M. just prior to closing the chest wall and discontinuing the anesthesia, another dose of Cedilanid (4 cc.) was given intravenously. The last tracing just prior to the patient being taken to his room, shows a normal sinus rhythm. This child has had an uneventful recovery and is maintaining a normal rhythm.

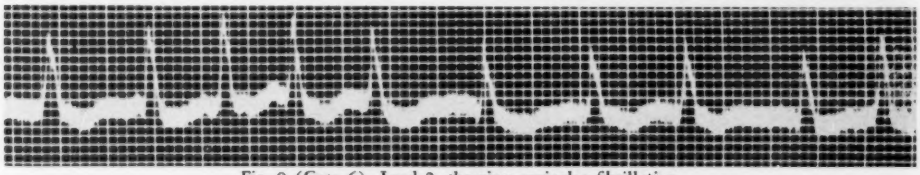

Fig. 9 (Case 6). Lead 2, showing auricular fibrillation.

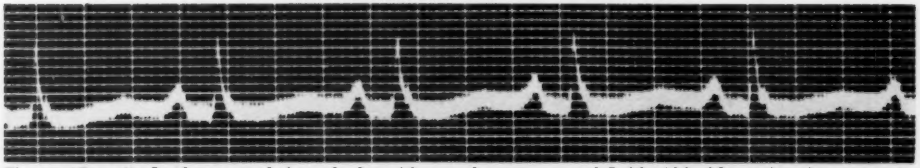

Fig. 10 (Case 6). Lead 2, normal sinus rhythm, 4 hours after 0.8 mgm. of Cedilanid had been given intravenously.

Fig. 12 (Case 7). Showing an auricular tachycardia with aberrant rhythm. Cedilanid 3¼ cc. given intravenously.

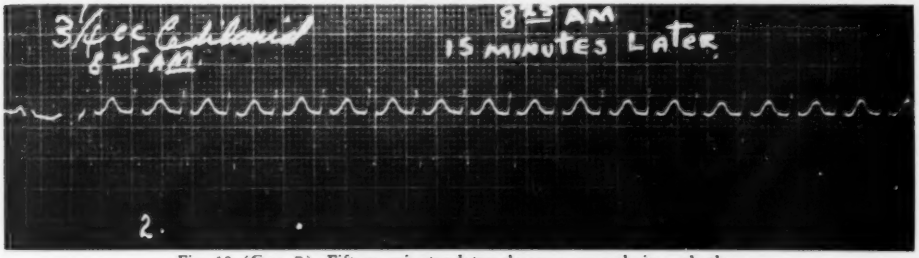

Fig. 13 (Case 7). Fifteen minutes later shows a normal sinus rhythm.

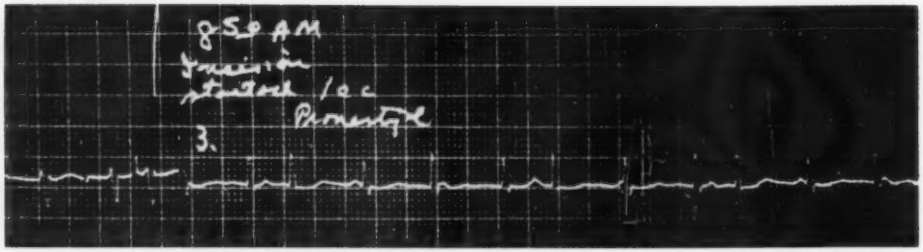

Fig. 14 (Case 7). Twenty-five minutes later, auricular premature beats. Pronestyl 1 cc. given intravenously.

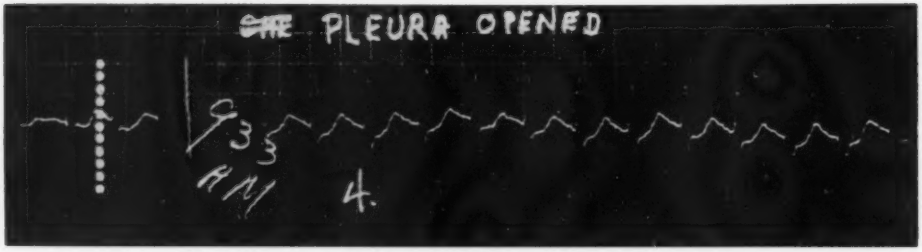

Fig. 15 (Case 7). Forty-three minutes later—still normal sinus rhythm.

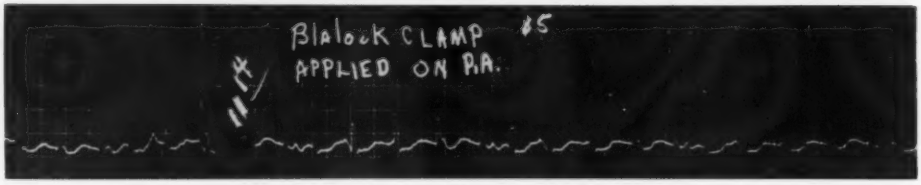

Fig. 16 (Case 7). Ventricular rate still fairly constant.

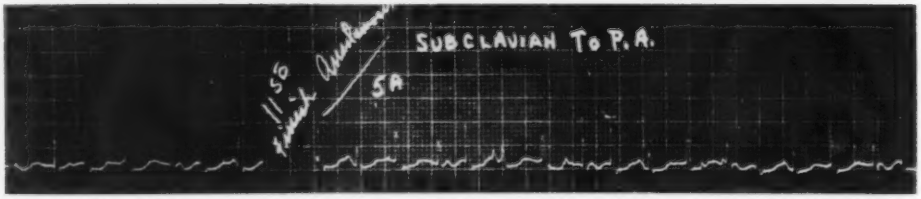

Fig. 17 (Case 7). Surgeon has completed the anastomosis of the subclavian artery to the pulmonary artery. No change in rate or rhythm.

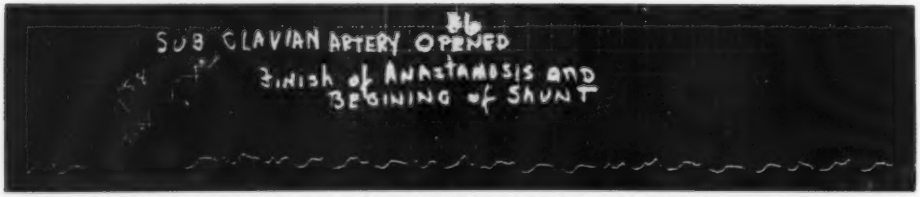

Fig. 18 (Case 7). Finish of the anastomosis and beginning of the shunt with subclavian artery open. No change in rate or rhythm.

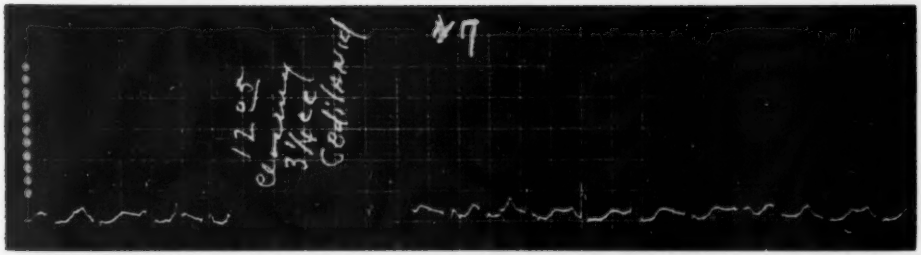

Fig. 19 (Case 7). Three hours after first dose of Cedilanid given appearance of premature auricular beats; 3¼ cc. of Cedilanid repeated.

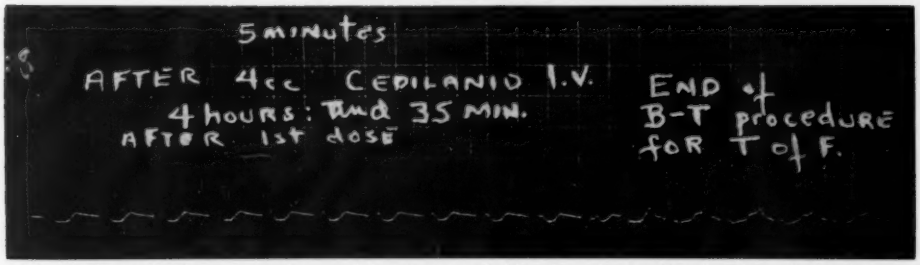

Fig. 20 (Case 7). Five minutes later and four hours and thirty-five minutes after first dose, rhythm has now become regular and has remained a normal sinus rhythm.

Conclusions

1. Lanatoside C is a safe and rapidly acting cardiac glycoside.

2. It possesses a wide therapeutic margin, is quickly eliminated and is less toxic than digitoxin.

3. It is effective in correcting some disorders of the heart beat which was shown clinically and electrocardiographically.

Young Hotel Bldg.

An Epidemic of Conjunctivitis in Hawaii

WILLIAM JOHN HOLMES, M.D.
HONOLULU

DURING THE first six months of 1951, 1963 new cases of acute follicular conjunctivitis were reported to the Hawaii Territorial Board of Health.

DR. HOLMES

Incidence

A spot survey of the population revealed that the disease was considerably more prevalent than the available statistics indicated. Many patients never consulted a physician at all; others sought help from druggists and family physicians who often failed to recognize the contagious nature of the affection and hence failed to report it; still others, living on military reservations, were treated at post dispensaries or military hospitals. Records from these sources show that the condition had been observed in a great many patients during the six months' period, but the exact number of cases seen was not known. From the foregoing, it seems likely that the total number of cases that occurred in Hawaii between January and June of 1951 was closer to five thousand than to the official figures on record. This means that approximately 1% of the total population had been infected.

Clinical Course

The clinical picture was usually characterized by rapid onset of redness, foreign body sensation, sensitivity to light and some pain in one eye. The second eye was involved in about 50% of the cases. The lids usually remained unaffected or showed only slight edema. The tarsal conjunctivae exhibited a velvety follicular type of hypertrophy which extended into the fornices. Both the tarsal and bulbar conjunctivae were extremely hyperemic. Multiple petechial subconjunctival hemorrhages were usually noted. In its early phase, the disease was seldom accompanied by any discharge. In a few instances, around the fifth day, a scant serous discharge did become apparent. No real or pseudo membranes were encountered in the cases personally observed, nor were any reported. Complications were few. Corneal involvement was not noted and only a small percentage of patients showed a ciliary injection. Preauricular adenopathy or tenderness was not observed. The disease attacked patients from four to seventy years of age, in all walks of life, and was noted with approximately equal frequency among all races. The average duration of the disease was from four to twelve days. However, several patients were seen who clinically improved in a few days but had repeated recurrences for as long as six to eight weeks following the original infection.

Received for publication August 27, 1951.
1013 Bishop Street.

Treatment

In the treatment of this condition, many of the antibiotics were effective. The most dramatic "cures" were obtained by local instillations of solutions containing aureomycin or 30% sulfacetimide. However, the local use of penicillin, sulfathiazole, Gantrisin, bacitracin, terramycin and others have also brought about favorable results. The usual antiseptic drops containing mercury, silver, metaphen, etc., were of little value. In the more stubborn cases, local treatment was supplemented by the oral administration of aureomycin and chloromycetin with favorable results.

Etiology

Repeated cultures, smears, and conjunctival scrapings failed to reveal any organism. In a few cases, late in the course of the disease, where secondary infection had set in, hemolytic streptococci and Koch-Weeks bacilli were found.

From the foregoing, it must be surmised that the agent in this disease was due to a virus with selective affinity for the eyes. It has been shown by Thygeson that some viruses possess affinities for particular tissues and several of them have their most important localization in the eye (inclusion blenorrhea, trachoma, etc.).

Epidemiology

It is believed that the virus in this epidemic was spread by droplet transmission, by swimming in infected ocean water, and by contact. One attack did not confer lasting immunity against reinfection.

Conclusion

The epidemic described was of viral origin and simulated both Beal's follicular conjunctivitis, and "swimming bath" conjunctivitis. It seemed in no way related to epidemic keratoconjunctivitis.

Hawaii
MEDICAL JOURNAL

OFFICIAL PUBLICATION OF THE HAWAII TERRITORIAL MEDICAL ASSOCIATION

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[EDITORIALS]

FIFTH PAN-PACIFIC SURGICAL CONGRESS

The Fifth Congress of the Pan-Pacific Surgical Association, which opens as we go to press, on November 12, set a new record of attendance at medical meetings in Hawaii: 241 local physicians and 281 visitors registered by the fifth day.

This year for the first time, the Congress is under the sponsorship of a separate organization, the Association, which has recently been formally incorporated under the laws of Hawaii by 10 charter members: the President and Secretary-Treasurer, Drs. F. J. Pinkerton and F. J. Halford; the 4 local councillors, Drs. J. E. Strode, C. E. Fronk, S. F. Stewart, and R. O. Brown; and 4 representatives of local surgical specialty societies, Drs. L. M. Wiig (Surgical Society), J. W. White (Orthopedic Society), H. E. Bowles (Obstetrical Society) and J. P. Frazer (Eye, Ear, Nose & Throat Society).

A preliminary Hospital Institute, jointly sponsored by the Association and the Hospital Association of Hawaii, was held on November 8 and 9. It was conducted by two eminent visitors, Drs. Edward H. Leveroos, Associate Secretary of the Council on Medical Education and Hospitals of the American Medical Association, and Dr. Anthony J. J. Rourke, Administrator of Stanford University Hospital and President of the American Hospital Association.

A cocktail supper party at the Officers' Club at Tripler Army Hospital on Sunday night preceded the formal opening of the meeting; it was in charge of the Ladies' Committee, headed by Mrs. Robert Johnston and consisting of Mrs. F. J. Pinkerton, Mrs. F. J. Halford, Mrs. J. Warren White, Mrs. C. M. Burgess, Mrs. Garton E. Wall, Mrs. Robert D. Millard, Mrs. Douglas Bell, and Mrs. Kyuro Okazaki.

Eminent visitors from all around the Pacific Ocean attended the meeting. Represented were: Alaska, Argentina, Australia, Canada, China, Japan, Korea, Mexico, New Zealand, the Philippines, the U.S.A., and Venezuela—and, of course, Hawaii.

The sessions were divided into general surgery sections and sections devoted to each of the various surgical specialties, each headed by a visiting chairman and a local vice-chairman. Four or five half-hour presentations were scheduled in most of the section sessions.

CORTICOTROPIN AND CORTISONE

Potentially dangerous though corticotropin ("ACTH") and cortisone are, it seems that they are doing, by and large, more good than harm. Their dangers are manifest largely after relatively prolonged use, as a result of which—paradoxically—they are even more useful in self-limited disorders than in the chronic and incurable diseases. Their high cost has militated against their excessive, indiscriminate or frivolous use: another example of the automatic, self-adjusting system of checks and balances that tends to establish itself under the system of free enterprise.

The statement that these hormones don't cure anything has been derided as "fashionable"; and lest this derision become fashionable, it may be desirable to reiterate the statement. They no more cure the diseases they control, than insulin cures diabetes, or thyroxin myxedema. Indeed, like both these long-familiar hormones, both corticotropin and cortisone exert a small but definite depressant effect upon their respective sources within the patient's body. If the disease being controlled by them terminates spontaneously before the hormones are stopped, it may seem to be cured; but

such an outcome depends upon either the interim disappearance of the causative agent, or the interim resumption of the patient's own natural supply of adrenal cortical hormones. The latter outcome seems to be favored by very gradual withdrawal of cortisone, or by concluding a course of cortisone with a few doses of corticotropin (ACTH). The problem of conducting patients safely through long periods of maintenance dosage seems, at the moment, one of the most important and also one of the most difficult which the clinician faces.

LOWER MORTALITY, LOWER MORALITY?

The decline of human mortality in the past fifty years is one of the wonders of the age we live in. Its complexities—for it is complex indeed—are skilfully and lucidly outlined by Dr. Frank G. Dickinson (Ph.D.), Director of the A.M.A.'s Bureau of Medical Economic Research, in an address before the Fraternal Actuarial Association on May 21, 1951.

The crude death rate has fallen from 17.2 per 1,000 in 1900 to 9.6 in 1950, and the infant death rate from around 150 per 1,000 to around 30. In 1900, 3 newborns out of 4 could expect to live to be 21 years old; in 1950, 9.4 out of 10 could plan on living this long.

The mean age of death is up from 34 years to 59 years! The median age of death was 30 in 1900; now it is 66. The population of the U.S.A. has doubled since 1900, but the population over 65 years of age has quadrupled—from 3 million to 12 million.

In 1900, only 24 per cent of eligible voters were 50 years old or over; in 1950 35 per cent have lived this long; and the proportion is steadily rising. Townsendism, once a joke, is growing less funny, and perhaps less remote, as the years go by.

Pension benefits for displaced oldsters are here in force, and they are slowly but steadily being increased in scope and amount. This is good—in a purely materialistic sense, at least—for the older segment of the population; but it is being paid for by the younger. The battle of the welfare state is in a fair way to being fought not by socialists versus reactionaries, but by the old recipients versus the young providers.

Dr. Dickinson asks: "Are we, the aging, going to let this low standard of social morality to continue—to go even lower? For . . . it comes down to how much we are willing to exploit youth. . . . I am ashamed of the raw deal which my generation has given the next."

Food for thought, this; and the doctors, who have contributed in very large measure to bringing the situation about, might do well to think about it too. Some solution of it must be found; the direction we are headed leads only to eventual disaster.

JAMES ALBERT MORGAN
1877 - 1951

Death claimed a kamaaina physician on September 25, 1951 when James Albert Morgan died after a long illness.

He was born in North Highlands, Mass., August 6, 1877, came to Honolulu in 1913 where he resided and practiced his specialty—otolaryngology and ophthalmology—until his retirement in 1945.

Doctor Morgan received his M.D. degree from Temple University in 1910. He received his premedical education at Little Blue School, Farrington, Me., Allens English and Classical School, West Newton, Mass., Cambridge Latin School, and Exeter Academy. Following graduation in medicine he served on the resident staff of the Philadelphia General Hospital. After this, through 1911-1913, he engaged in private practice in Philadelphia.

He was a member of the Honolulu County and Territorial Medical Associations, American College of Surgeons, American Academy of Ophthalmology and Otolaryngology, Pacific Coast Oto-Ophthalmological Association, and the American Society for Advancement of Science.

In addition to his professional activities he had many interests. He was a Mason, member of the Honolulu Rotary Club, member of the Board of Directors of the Protestant Episcopal Church, a member of the Board of Managers of the Army and Navy Corp., Y.M.C.A., a member of the Massachusetts Society of Mayflower Descendants, the Pacific Club, and the Oahu Country Club in Honolulu.

He was married to Elsie Edna Johnson at Media, Pa., in 1911. Mrs. Morgan and three sons survive him. They are James A., Jr., Woodland, Calif.; Dr. Andrew L., resident in urology, Veterans Hospital, Newington, Conn., and William Brewster, Honolulu.

His countless acts of kindness to many of us are known only to the recipients, but will always be remembered and appreciated.

G. A. BATTEN, M.D.

MEDICAL NEWS

Cortisone is structurally similar to estrogen, which is inactivated in the liver. This **inactivation can be blocked with para-aminobenzoic acid.** In the hope that PABA would slow down the destruction of cortisone in the body, Wiesel, et al., gave the two drugs together to 15 rheumatoid arthritics and got a synergistic action: 25 mg. cortisone I.M. and 12 gm. PABA orally per day gave relief the same as or better than that obtained with standard doses of I.M. cortisone (100-200 mg. per day). (*Am. J. Med. Sci.* 222:243 [Sept.] 1951.)

Just shows you can't trust the *Ladies' Home Bosom Pal* and allied magazines: Reilly and Earle tried **methyltestosterone** 5 mg. daily in 25 **premature infants** and found that 25 untreated prematures gained weight just as fast and went home just as soon. (*Am. J. Dis. Child.* 82:323 [Sept.] 1951.)

Dept. of "Which Page D'Ya Read?"

Greenblatt, et al. describe cures of intractable **Trichomonas** vaginalis vaginitis in 80 per cent of 48 women treated with insufflation of an **aureomycin-talc-lactose** powder. (*Am. J. Obst. & Gyn.* 62:423 [Aug.] 1951.)

While on page 452 Nayfield wonders about the **pruritus vulvae** which occurred in 4 of his patients following oral administration of **aureomycin.** (He found **monilia** in three, which responded to **propion gel.**)

Cortisone produced involution within 48 hours of an **erythema nodosum** which had been plaguing a pregnant woman for 3 months, report Farber and Mandelbaum. (*Arch. Int. Med.* 88:395 [Sept.] 1951.)

After 6 months of a downhill course with **pemphigus** (wt. loss from 235 to 118 lbs.) a patient experienced complete clearing of all lesions after 4 days' treatment with **Depo-Heparin** (200 mg. I.M. daily). Magner, et al. conclude with a magnificent understatement: "We are yet uncertain of the mechanisms involved."

Remissions in 17 patients with **pemphigus** (4 of them "malignant") obtained with **ACTH** and **cortisone** are described by Frazier, et al. in *Am. J. Med. Sci.* 222:308 (Sept.) 1951.

ACTH and **cortisone** produced improvement in symptoms and pulmonary function tests in a group of 9 patients with pulmonary emphysema studied by Lukas, but only in those patients who had **bronchiolar obstruction.** A bronchodilating action superior to epinephrine was demonstrated in 2 patients. (*Am. Rev. Tuberc.* 64:279 [Sept.] 1951.)

Wait until the American Tobacco Co. hears of this: T. H. Maren (Johns Hopkins) reports (*Proc. Soc. Exp. Biol. & Med.* 77:521 [July] 1951) that **nicotine** is not only a highly potent antipyretic and antidiuretic, but also has significant **adrenocorticotropic** action. ACTH will probably be replaced by ACTLS (After Cortisone Try Lucky Strike).

Gray, et al., describe dramatic remissions in 5 of 6 patients with **ulcerative colitis** and 2 patients with **regional ileitis,** after **ACTH** and **cortisone.** Relapses occurred (responsive to second course, and "maintenance" therapy). (*New Eng. J. Med.* 245:481 [Sept. 27] 1951.)

Kirsner and Palmer are also happy about the results obtained with these hormones in 27 of 40 patients with **ulcerative colitis.** (*J.A.M.A.* 147:541 [Oct. 6] 1951.)

The Hepatitis Center, 98th General Hospital, U. S. Zone of Occupation, Germany, reports with (surprising) enthusiasm on the effects of **ACTH** in **acute viral hepatitis.** In all 5 patients treated there was prompt return of appetite and energy (whereby it became difficult to enforce bed rest), and a definite fall in serum bilirubin was noted, with relief of pruritus. On the debit side: no change in liver size or tenderness, and no change in liver function tests. Also, 4 of the 5 patients developed acute migratory polyarthralgia when ACTH was stopped. (Colbert, et al. *New Eng. J. Med.* 245:172 [Aug. 2] 1951.)

Barrett confirms the usefulness of **alumina gels** in the prophylaxis of **recurrent renal calculi.** Aluminum combines with ingested phosphate and the insoluble salt is excreted in the stool, reducing urinary phosphate excretion. Administration to 34 "stone-formers" for 2½ years was highly effective in preventing new calculi. "Basaljel" (Wyeth), an aluminum carbonate gel, was more effective than other aluminum gels, according to Barrett. (*J. Urol.* 66:315 [Sept.] 1951.)

Balfour, et al., are enthusiastic about **oral procaine** (4 cc. of 2% procaine in one dram of metamucil, t.i.d., ac.) in the treatment of painful **cardiospasm** in patients who are poor risks or who refuse dilatation of the esophagus. (Gastroenterol. 18:606 [Aug.] 1951.)

Dannenberg describes development of **tolerance to antihistaminics** in a majority of patients in 7 to 20 days. He advises **interrupted courses** if prolonged treatment is necessary. Return of effectiveness takes 3 to 14 days of abstinence from the drug. (*J. Allergy* 22:330 [July] 1951.)

The millennium—almost.

Boots and Company gave **cortisone** to eleven elders (ages 54 to 82) with degenerative joint disease of the hip, colloquially known as **malum coxae senilis,** obtaining relief of pain and increased range of motion in seven. (*J.A.M.A.* 147:549 [Oct. 6] 1951.)

But, Brown and friends tried cortisone in 8 such patients with benefit in only two. (*J.A.M.A.* ibid. p. 551.)

Economical treatment of **bronchial asthma** with **cortisone** is described by Gelfand (*N. Eng. J. Med.* 245: 293 [Aug. 23] 1951). He dissolved 25 mg. of cortone in 5 cc. of saline and gave 1 cc. of this mixture by aerosol every hour for 10 hours daily. After such treatment the patients were probably tired, but happy.

The usual vasodilating agents (alcohol, body-warming, tetraethylammonium chloride, and Priscoline) produce an increase in peripheral (foot) blood flow equal to only half that following lumbar paravertebral block. The newest dilator, **Hexamethonium** (C 6) produces effects *equal* to paravertebral block. Finnerty and Freis were very favorably impressed with its action in 29 patients with **peripheral vascular disease** in whom they tried it. Relief in Buerger's, Raynaud's, causalgia and arteriosclerosis obliterans was obtained with hypo doses of 50 mg. and oral doses of 1.5 gms. C 6 has prolonged action (6-12 hours) and the only drawback is postural hypotension. (*N. Eng. J. Med.* 245:325 [Aug. 30] 1951.)

Benemid, the renal blocking agent so effective in elevating serum levels of penicillin and PAS, seems to have an opposite effect on uric acid. Accelerated **uric acid excretion** is reported in both normal and gouty patients by Bishop, et al. (*J. Clin. Invest.* 30:889 [Aug.] 1951.)

C. A. Domzalski, Jr., M.D.

THE HONOLULU COUNTY MEDICAL LIBRARY

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and at noon on Territorial holidays

RECENT ACQUISITIONS

Biochemistry

Harper, H. A. *Review of physiological chemistry.* 3rd ed. c1951. (gift of publisher)

Luck, J. M., ed. *Annual review of biochemistry.* v.20. 1951.

Cancer

Berman, Charles. *Primary carcinoma of the liver.* 1951.

Diagnosis

Brust, R. W. *Physical diagnosis.* c1951. (gift of publisher)

Electrocardiography

Lipman, B. S. *Clinical unipolar electrocardiography.* c1951. (gift of publisher)

Genito-Urinary System

Allen, A. C. *The kidney.* c1951. (gift of publisher)

Narath, P. A. *Renal pelvis and ureter.* c1951. (gift of publisher)

Gynecology and Obstetrics

Kosmak, G. W., ed. *Transactions of the International and Fourth American Congress on Obstetrics and Gynecology.* c1951. (gift of publisher)

Hematology

Moore, C. V., ed. *Proceedings of the Third International Congress of the International Society of Hematology.* c1951. (gift of publisher)

Mental Hygiene

Maas, H. S., ed. *Adventure in mental health.* c1951. (gift of publisher)

Ophthalmology

Keeney, A. H. *Chronology of ophthalmic development.* c1951. (gift of publisher)

Orthopedics

American Academy of Orthopedic Surgeons. *Instructional course lectures.* v.8. 1951.

Key, J. A. *The management of fractures, dislocations and sprains.* c1951. (gift of publisher)

Pediatrics

Reynolds, M. M. *Children from seed to saplings.* 2nd ed. c1951. (gift of publisher)

Peripheral Vascular Diseases

Heymans, Corneille. *Introduction to the regulation of blood pressure and heart rate.* c1951. (gift of publisher)

Marple, C. D. *Thromboembolic conditions and their treatment with anticoagulants.* c1951. (gift of publisher)

Roth, G. M. *Tobacco and the cardiovascular system.* c1951. (gift of publisher)

Spitzer, Alexander. *The architecture of normal and malformed hearts.* c1951. (gift of publisher)

Therapeutics

Mennell, J. B. *Manual therapy.* c1951. (gift of publisher)

Tropical Medicine

Gradwohl, R. B. H. *Clinical tropical medicine.* c1951. (gift of publisher)

Tuberculosis

National Tuberculosis Association. *Tuberculosis hospital and sanatorium directory.* c1951. (gift of N. T. A.)

Tumors

Karsner, H. T. *Tumors of the adrenal.* (Sect. 8, Fasc. 29, Atlas of Tumor Pathology.) 1950. (gift of Armed Forces Institute of Pathology)

Stout, A. P. *Tumors of the peripheral nervous system.* (Sect. 2, Fasc. 6, Atlas of Tumor Pathology.) 1949. (gift of Armed Forces Institute of Pathology)

Miscellaneous

Akana, Akaiko, trans. *Hawaiian herbs of medicinal value.* 1922.

A.M.A. Council on Pharmacy and Chemistry. *New and non-official remedies. 1951.*

Brown, A. L. *Technical methods for the technician.* 4th ed. 1951. (gift of author)

Quarterly Cumulative Index Medicus. v.47. Jan.-June 1950.

Tead, Ordway. *The art of administration.* c1951. (gift of publisher)

Youmans, J. B., ed. *Medicine of the year. 1951.* c1951. (gift of publisher)

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The following list of books purchased for the Library by the Board of Medical Examiners is supplementary to the one published in the September-October issue of the Journal. This collection has already had wide circulation, and doctors and nurses who have used these books have expressed to us their gratitude. We wish to pass their—and our—acknowledgments on to the Board.

Sweet, R. H. *Thoracic surgery.* c1950.

Overholser, Winifred. *Handbook of psychiatry.* c1947.

Strecker, E. A. *Fundamentals of psychiatry.* 4th ed. c1947.

Cole, W. H., ed. *Operative technic in specialty surgery.* c1949.

Cole, W. H., ed. *Operative technic in general surgery.* c1949.
Maingot, Rodney. *Abdominal operations.* 2nd ed. c1948.
Kolmer, J. A. *Clinical diagnosis by laboratory examinations.* 2nd ed. c1948.
U. S. Naval Medical School. *Color atlas of pathology.* n.d.
Anderson, W. A. D., ed. *Pathology.* c1948.
Meleney, F. L. *Clinical aspects and treatment of surgical infections.* c1949.
Regan, L. J. *Doctor and patient and the law.* 2nd ed. c1949.
Maximow, A. A. *A textbook of histology.* 5th ed. c1948.
Gray, Henry. *Anatomy of the human body.* 25th ed. c1948.
Burch, G. E. *A primer of electrocardiography.* 2nd ed. rev. c1949.
Cozen, Lewis. *Office orthopedics.* c1950.
Boyd, William. *A textbook of pathology.* 5th ed. rev. c1947.
Boyd, William. *Surgical pathology.* 6th ed. c1947.
Faulkner, R. L. *Essentials of obstetrical and gynecological pathology.* c1949.
Harrison, T. R., ed. *Principles of internal medicine.* c1950.
Pullen, R. L., ed. *Medical diagnosis.* 2nd ed. c1950.
Bastedo, W. A. *Pharmacology, therapeutics and prescription writing.* c1947.
Hawley, E. E. *The art and science of nutrition.* 3rd ed. c1949.
Hawk, P. B. *Practical physiological chemistry.* 12th ed. c1947.
Cheney, Garnett. *Medical management of gastrointestinal disorders.* c1950.
Brown, J. B. *Skin grafting.* 2nd ed. c1949.
Foot, N. C. *Identification of tumors.* c1948.
Adriani, John. *Techniques and procedures of anesthesia.* c1947.
Sodeman, W. A., ed. *Pathologic physiology.* c1950.
McCormick, C. O. *A textbook on pathology of labor, the puerperium and the newborn.* 2nd ed. c1947.
Schaub, I. G. *Diagnostic bacteriology.* 3rd ed. c1947.
Rice, T. B. *A textbook of bacteriology.* 4th ed. c1947.
Janney, J. C. *Medical gynecology.* 2nd ed. c1950.
Cantarow, Abraham. *Clinical biochemistry.* 4th ed. c1949.
Lever, W. F. *Histopathology of the skin.* c1949.
Geschickter, C. F. *Tumors of bone.* 3rd ed. c1949.
Wangensteen, O. H. *Intestinal obstructions.* 2nd ed. c1942.
Stieglitz, E. J., ed. *Geriatric medicine.* 2nd ed. c1949.
Sutton, R. L. *Handbook of diseases of the skin.* c1949.
Davison, F. R. *Handbook of materia medica, toxicology and pharmacology.* 4th ed. c1949.
Meakins, J. C. *Symptoms in diagnosis.* c 1948.
Titus, Paul. *The management of obstetric difficulties.* 4th ed. c1950.
Karsner, H. T. *Human pathology.* 7th ed. c1949.
Bell, E. T. *A textbook of pathology.* 6th ed. rev. c1947.
Reich, W. J. *Practical gynecology.* c1950.
Thewlis, M. W. *The care of the aged.* 5th ed. rev. c1946.
Cecil, R. L., ed. *A textbook of medicine.* 8th ed. c1951.
Geschickter, C. F. *Diseases of the breast.* 2nd ed. c1945.
Magnuson, P. B. *Fractures.* 5th ed. c1949.
Kleiner, I. S. *Human biochemistry.* 2nd ed. c1948.
Ackerman, L. V. *Cancer.* c1947.
Fulton, J. F., ed. *A textbook of physiology.* 16th ed. c1949.
Behrens, C. F., ed. *Atomic medicine.* c1949.
Curtis, A. H. *A textbook of gynecology.* 6th ed. c1950.
Anson, B. J., *An atlas of human anatomy.* c1950.
Pullen, R. L., ed. *Communicable diseases.* c1950.
Lull, C. B. *Control of pain in childbirth.* 3rd ed. rev. c1948.
Lichtenstein, B. W. *A textbook of neuropathology.* c1949.
Christopher, Frederick. *Minor surgery.* 6th ed. c1948.
Rubin, E. H. *Diseases of the chest.* c1947.
Callander, C. L. *Surgical anatomy.* 2nd ed. rev. c1948.
Sunderman, F. W. *Normal values in clinical medicine.* c1949.
Duncan, G. G., ed. *Diseases of metabolism.* 2nd ed. c1947.
Fine, Jacob. *Care of the surgical patient.* c1949.
Novak, Emil. *Gynecological and obstetrical pathology.* 2nd ed. c1947.
Christopher, Frederick. *A textbook of surgery.* 5th ed. c1949.
Williams, R. H., ed. *Textbook of endocrinology.* c1950.
Eastman, N. J. *Williams Obstetrics.* 10th ed. c1950.
Bunnell, Sterling. *Surgery of the hand.* 2nd ed. c1948.
Ferguson, L. K. *Surgery of the ambulatory patient.* 2nd ed. c1947.
White, B. V. *Diagnosis in daily practice.* c1947.
Saul, L. V. *Basis of human behavior.* c1951.

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Dr. Richardson of San Francisco, who flew to Honolulu to operate on George Vanderbilt, visited the Library several times. He was most complimentary about the collection, and told us that he would "like to stay for a week and do nothing but study in your library."

BOOK REVIEWS

Technical Methods for the Technician.

By Anson Lee Brown, B.A., M.D., Fourth Edition, 784 pp. Price $10.00. Anson Lee Brown, Inc., 1951.

This is primarily a book for beginners in the field. It brings up a number of very simple questions which tend to help the novice. It describes tests, cook book style, but discusses little of the principles and stumbling blocks present. For the graduate technician its value is chiefly in that it lists the procedures in many tests and has tried to maintain latest terminology. The book certainly must be used only in conjunction with more detailed and more basic texts. Used in this way it has value for the technician.

The book has a practical binding and the print is clear. Some color plates are present and a fair number of black and white pictures and diagrammatic representations are also included.

W. Harold Civin, M.D.

Causalgia.

By Frank H. Mayfield, M.D., 65 pp. with illustrations. Price $2.25. Charles C. Thomas, 1951.

A very concentrated and meaty monograph beginning with a short history of the evolution of our present concepts of definition and treatment of causalgia. The author specifically defines what he means by causalgia and limits his case histories to these specific type cases only.

In my opinion this is a well written monograph and worth the time and effort one would spend to refresh himself on peripheral nerve injuries.

Wm. M. Walsh, M.D.

The Management of Fractures, Dislocations, and Sprains.

By John Albert Key, B.S., M.D. and H. Earle Conwell, M.D., F.A.C.S., Fifth Edition, 1232 pp. with illustrations. Price $16.00. C. V. Mosby Company, 1951.

Drs. Key and Conwell have again edited an excellent book on fractures, dislocations and sprains. This edition has fewer pages than the previous edition which is certainly a step in the right direction. The printing and binding of this book is excellent.

The authors cover their subject very well and completely. The material covered included many new ideas and re-evaluation of the old methods. Considerable emphasis is placed on methods of treatment that can be of considerable value to the general practitioner.

Since the possibility of malpractice suits in fracture cases is much greater today, the chapter on "Medico-legal Aspects in Fracture Cases" is invaluable. Also an excellent chapter on the subject of workmen's compensation laws has been included. The general practitioner as well the specialist can find much of value in this fifth edition.

B. Allen Richardson, M.D.

Review of Physiological Chemistry.

By Harold A. Harper, Ph.D., Third Edition, 260 pp. Price $3.50. University Medical Publishers, Palo Alto, California, 1951.

This is an excellent manual for a quick review, summary, or reference concerning the more general aspects of physiological chemistry in their relationship to medicine. The latest concepts are all clearly presented. No great mass of detail is resorted to, and the charts and tables are easily followed. There are quite a few formulas but these can be easily overlooked if one is not interested in them.

The physical aspects of the book are not elaborate. The cover is cardboard and the binding is plastic. The print is moderately large and is legible.

This is really the best physiological chemistry reference that I know for the practitioner of medicine.

W. Harold Civin, M.D.

The Regulation of Blood Pressure and Heart Rate.

By Corneille Heymans, M.D., 60 pp. Price $2.00. Charles C. Thomas, 1950.

This is a concentrated treatise on the physiology of the vascular system. The author has drawn heavily on contemporary literature and has used diagrams freely throughout. Much of the material is reminiscent of medical school sophomore physiology. The material is well organized, and it should be considered primarily as a book for those who wish to intensively review their physiology of the vascular system. Despite the fact that it is not a long treatise, the material is so meaty that it cannot be skimmed through quickly.

For those physicians who wish to review some of the important physiological mechanisms of the vascular system I would recommend this monograph. It is not a substitute for the chapters on vascular physiology in Best and Taylor, but there is enough material to make it worthwhile, particularly from the standpoint of being up-to-date.

Morton E. Berk, M.D.

Pulmonary Ventilation and Its Physiological Regulation.

By John S. Gray, M.D., Ph.D. 82 pp. Price $2.00. Charles C. Thomas, Publisher, Springfield, Illinois, 1950.

This brief monograph gives an excellent description of the physiological mechanisms governing respiration. The author shows clearly that oxygen is strongly contraindicated in morphine and barbiturate poisonings. He then progresses into a highly technical description of the details of the mechanisms of pulmonary ventilation. This book is of considerable value for the expert in the field of respiratory physiology, but leaves the novice considerably bewildered at the complex formulas used in the calculations.

Raymond M. deHay, M.D.

Clinical Unipolar Electrocardiography.

By Bernard S. Lipman, A.B., M.D. and Edward Massie, A.B., M.D., FACP., 232 pp. Price $5.00. Year Book Publishers, Inc., 1951.

By the use of understandable application of electrophysiologic principles, numerous sketches and a thoroughly readable text, the authors have produced an excellent manual of clinical electrocardiography.

Although there are 91 clear reproductions of unipolar electrocardiographs at the end of the text, there is fortunately no encouragement for either the novice or experienced electrocardiographer to approach this field by memorizing characteristic patterns.

It is recommended to all who interpret electrocardiograms and especially those who have not recently reviewed the advantages of unipolar techniques.

FRED I. GILBERT, JR., M.D.

The Odyssey of Modern Drug Research.

By Robert Burlingham, 124 pp. Price, free. Upjohn Company, 1951.

This enthralling account of how the pharmaceutical houses ply their trade in the twentieth century, written by a former associate editor of *Fortune*, is well worth the time it takes to read it. It is astonishing, and highly refreshing, to note the frequent complimentary references to enterprises of competing pharmaceutical firms, stories of their accomplishments and sacrifices, told side by side with, and with just as much emphasis as that accorded to, Upjohn's own. From this point of view the book is an admirable example of good public relations. From any point of view it is fascinating reading.

Bound only in heavy paper, the book is printed in clear large type on glossy paper with wide margins; it is profusely illustrated in color. If you haven't seen it, by all means ask the local representative for a copy of your own.

HARRY L. ARNOLD, JR., M.D.

Handbook of Pediatric Medical Emergencies.

By Adolph G. DeSanctis, M.D. and Charles Varga, M.D., 285 pp. with 51 illustrations. Price $5.00. C. V. Mosby Co., 1951.

Originally intended as a guide for members of the resident staff, this handbook has been revised and enlarged for the benefit of practitioners, who must frequently administer rapid, emergency therapy to various conditions encountered in pediatric practice. Here in 1-2-3 fashion are given outlines of treatment for such conditions as acute diarrhea, convulsions, croup, and accidental injuries and poisoning. Although one may not agree completely with the methods of therapy as outlined, this book furnishes a quick reference text; modifications in therapy for each individual patient may be made therefrom. It is felt, therefore, that this little book has a place in the library of a busy clinician, within easy reach.

JOHN T. KOMETANI, M.D.

Manual Therapy.

By James B. Mennell, M.D., 64 pp. Price $2.25. Charles C. Thomas, 1951.

Dr. Mennell gives a brief history of massage and manual therapy, and feels introduction of Swedish massage and gymnastics was first step in establishing physical medicine, but it was exploited and, due to false statements as to results of massage, its use was neglected. He explains how one must apply physiological laws to all forms of physical treatments. He gives types of massage treatments, cupping, techniques, administration, dosage and desired results in descriptive detail, and a detailed explanation of passive, assistive and resistive movements as to range of motion and positions in which to get best results.

Joint manipulation is fully explained with descriptive pictures and discussions of method used. In joint manipulations all movements should follow the law of living anatomical and physiological movement.

ELEANOR H. HANSEN, R.N., P.T.A.

Adventure in Mental Health.

Edited by Henry S. Maas, Ph.D., 334 pp. Price $4.50. Columbia University Press, 1951.

This book on mental health, written in simple understandable language, is a compilation of the experiences of 16 psychiatric social workers who have completely covered the subject in its relationship, functions and need, in the military setting in World War II. It is of extreme value to those in the profession who may be anticipating a military career and should be part of their armamentarium.

CAPT. M. SHUPP, M.C., U.S.N.

Tobacco and the Cardiovascular System.

By Grace M. Roth, Ph.D. 66 pages. Price $2.25. Publication No. 100 of the American Lecture Series of Medical Monographs. Charles C. Thomas, 1951.

Here is all you could want to know about the vasoconstriction and tachycardia produced in normal persons by smoking, except perhaps an answer to the question of whether an exciting movie or whodunit produces about the same effect. The literature is reviewed in detail (72 references) and a number of original experiments are reported, with charts and graphs. Thackeray's "amiable anodyne" is reduced to millimeters of mercury, degrees Centigrade, and pulsations per minute. The tone is much more objective and dispassionate than is usual in works of this sort—apparently most of the people who investigate tobacco don't approve of its use—but the author does believe, apparently, that the effects she describes are harmful ones and tend to shorten life somewhat. Noteworthy is the quotation from Mark Twain to the effect that giving up smoking was the easiest thing he ever did—and he ought to know, he added, because he'd done it a thousand times!

HARRY L. ARNOLD, JR., M.D.

COUNTY SOCIETY REPORTS

HAWAII COUNTY MEDICAL SOCIETY

The 312th regular meeting of the Hawaii County Medical Society was called to order by **President T. David Woo** at 7:45 p.m., Thursday, September 27, 1951 in the staff-room of Hilo Memorial Hospital. Guests present were **Major M. D. Boyd, Col. William Boyen** of the Selective Service Board; **Dr. J. S. Kuger** of Kilauea Military Camp, **Dr. R. Kaufmann,** and **Dr. H. Irwin.**

The Society was notified of the application for membership of **Dr. Robert J. Kaufmann** of Pahala, Kau, Hawaii. The application will be referred to the Board of Censors and final action will be taken at the next regular meeting of the Society.

A copy of the letter from the Hawaii Territorial Medical Association to the Woman's Auxiliary to the Hawaii County Medical Society in regards to helping with radio advertisements and playing records against socialized medicine and the refilling of health literature in racks in doctors' offices was read. After a short discussion it was moved by **Dr. H. E. Crawford,** and seconded by **Dr. R. Miyamoto,** that we sanction the use of the recordings over the radio, but before any expenses are involved, we would like to know details concerning such a program. This motion was passed unanimously. The Woman's Auxiliary will be notified of this action.

President Woo announced that there is now available a Speech Training Center in Hilo located at the Hilo Intermediate School under the direction of Miss Hang Fa Elaine Wong and suggested that the doctors may make use of the services of Miss Wong.

The question of moving the Library from Hilo Memorial Hospital to Puumaile Hospital was again brought up for discussion since opinions of most of the members have changed since the last meeting. After a short discussion it was moved by **Dr. R. Miyamoto** and seconded by **Dr. H. E. Crawford** that the library be moved to Puumaile Hospital when feasible. This motion was passed unanimously. **Dr. S. Mizuire** stated that the Cancer Society will give $100 to be used for subscriptions to the Cancer Journal and other journals relating to cancer.

Dr. H. E. Crawford gave a brief over-all picture as to what is going on and what is planned for Civilian Defense. However, he stated that there is no over-all plan as yet.

Dr. S. Mizuire explained what has been going on concerning the blood emergency program and stated that there has been created a Territorial Blood Committee. He also stated that the Blood Bank of Hawaii has been taking the lead by forming an Emergency Blood Bank located in Honolulu, T. H. He also added that technicians will be trained and that Hilo will send 16 for training . . . 4 at a time for a period of 2 weeks. This will start on October 1, 1951. The trainees will be paid $200 for the two weeks training period. Those trained will be expected to work everytime the blood bank team comes over to Hilo.

Major Boyd of Tripler Army Hospital then gave a talk on the Medical Aspects of the Selective Service. He stated that one of the greatest problems is giving physical examinations (and consultations) to the inductees on the outside islands since sending all inductees to Honolulu for examination has cost the government large sums of money. He asked for suggestions from the members of the local Society.

FRANCIS F. C. WONG, M.D.
Secretary

HONOLULU COUNTY MEDICAL SOCIETY

The September meeting of the Society was held on September 7, 1951 at 7:30 p.m., in the Mabel Smyth Auditorium with **Dr. John Devereux** presiding and approximately 115 members and guests present.

An interesting program entitled "What is Your Health Department Doing?" was presented.

Dr. C. L. Wilbar, moderator, described the work of the Division of Preventive Medicine in which there are the following seven bureaus: Epidemiology, Laboratories, Maternal and Child Health and Crippled Children, Mental Hygiene, Nutrition, Tuberculosis, and Venereal Diseases and Cancer Control.

Mr. B. J. McMorrow, Director of the Division of Sanitation, spoke on the work of his division. **Mr. M. A. Taff,** Chief, Bureau of Health Statistics, presented the highlights of his work as they concern the physicians. **Miss Laura Draper,** Chief of the Bureau of Public Health Nursing, outlined the work of the public health nurse. **Dr. E. K. Chung-Hoon** described the Hansen's disease program. **Dr. Leo Bernstein** discussed the program of the Division of Hospitals and Medical Care.

Dr. Dan Gordon, ophthalmologist and Assistant Professor of Clinical Surgery at Cornell University, spoke on the use of ACTH and cortisone in eye diseases.

Dr. Samuel J. Glass, of the Department of Endocrinology of the Cedars of Lebanon Hospital in Los Angeles, described the influence of the liver on sex endocrine functions.

Meeting adjourned at 10:30 p.m. to refreshments on the lanai.

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A dinner meeting of the Society was held on October 5, 1951, 7:30 p.m. at the Oahu Country Club with **Dr. John Devereux** presiding and approximately 145 members and guests present.

In accordance with the provisions set forth in the Constitution and By-Laws regarding amendments, it was unanimously voted that associate membership dues be increased from $5.00 to $10.00 yearly, effective January 1, 1952.

Dr. F. J. Pinkerton, President of the Pan-Pacific Surgical Association, requested that physicians "turn out" to make the Pan-Pacific Surgical Congress a great success.

Dr. Devereux announced that on Wednesday evening, October 17, the Medical Society and the Society of Sigma Xi are co-sponsoring a lecture honoring **Sir Edward Mellanby** of London, England, former Secretary of the British Medical Research Council. "The Effect

of Vitamins A and D on Bones and the Nervous System" will be discussed by Dr. Mellanby.

An interesting nonscientific program was prepared for the meeting.

1. *Investments for Doctors*—**Mr. George H. Kellerman,** Vice President and Manager, Stocks and Bonds Department, Bishop Trust Company, Ltd.
2. *Doctors' Tax Dilemma* — **Mr. James H. Anthony,** Assistant Treasurer and Manager, Tax Department, Bishop Trust Company, Ltd.
3. *Malpractice*—**Mr. Thomas M. Waddoups,** President, Territory of Hawaii Bar Association.

A vigorous question and answer period followed the above outlined program.

WILLIAM S. ITO, M.D.
Secretary

KAUAI COUNTY MEDICAL SOCIETY

The regular monthly meeting of the Kauai County Medical Society was held at the G. N. Wilcox Memorial Hospital at 7:30 p.m. on Wednesday, September 12, 1951 with **Dr. Fujii** presiding.

The minutes of the previous meeting were read and approved.

Dr. Peter Kim's application for membership to the Society was read and it was moved and seconded that he be accepted into the Society. A prorated fee of $5.00 was promised the Society by Dr. Kim.

The amendment to the By-Laws regarding military status has been withdrawn by **Dr. Wade** after his careful perusal of present, past, and other existing Constitutions and By-Laws.

A lengthy discussion followed on immunization for typhoid and tetanus, particularly on the subject of fees. It was the majority's opinion that the fee for this service should be left to the individual physician.

Dr. Lawrence Wiig's letter to **Dr. Wallis** concerning mainland speaker or speakers to be available in early winter following the Pan-Pacific Surgical Conference was studied. The program was heartily accepted by the Society and Dr. Wallis was asked to contact Dr. Wiig for arrangement.

Communication from **Dr. Fujii** to **Mr. Charles Fern** was presented. It consisted of **Dr. C. L. Wilbar's** request for assistance to send **Dr. Dorothy Kemp** for further Board of Health studies. The Society went on record in support of this worthy request.

Dr. Harrington of the Mayo Clinic will be available after the Pan-Pacific Surgical Conference. It was suggested that he be invited to talk to the Society.

Three films titled "Subtotal Gastrectomy" and one titled "Surgical Treatment of Pyloric Hypertrophy" were shown.

CLYDE H. ISHII, M.D.
Secretary

MAUI COUNTY MEDICAL SOCIETY

Regular meeting of the Maui County Medical Society was called to order by **President Dr. E. Shimokawa** at 8:00 p.m. on Tuesday, August 21, 1951, at the Grand Hotel. Guests present were: **Dr. John Bell** and **Dr. Thomas T. Tennant.**

A brief scientific meeting preceded the business portion. **Dr. John Bell,** heart specialist and member of the Hawaii Heart Association, was guest speaker. He spoke briefly on heart conditions in general and stressed the value of ACTH in critical cases of rheumatic fever.

Members expressed the feeling that a temporary pathologist working out of Honolulu was not satisfactory. A letter was received from **Dr. A. Y. Wong** asking for further clarification of the possibility of obtaining a pathologist. After a lengthy discussion, motion was made, seconded, and unanimously carried, that the Pathology Committee of which **Dr. St. Sure** is chairman, be instructed to immediately contact a physician on the mainland and present a report of our present needs, conditions, facilities, salary, etc. Conditions are to be based on an agreement made by the Cancer Society and the Maui hospitals, namely, Malulani Hospital, Kula Sanatorium and Kula General Hospital, Pioneer Mill Hospital, and Puunene Hospital.

A letter of resignation from **Dr. Vernon K. S. Jim** was read and approved.

A letter from **Dr. F. K. Lam** was read. It included leaflets, posters and instructions on the Immunization Program, which were distributed by **Dr. Luthrop.** On motion duly made, seconded and carried, it was agreed to charge $1.00 per injection. A letter expressing approval of such a program will be written.

Dr. L. W. Harrington of the Mayo Clinic will come to Maui in November 1951. **Dr. McArthur** was asked to accept his offer to talk to the Society.

Indigent Cases: **Dr. Patterson** stressed the point that private physicians give free services to indigents. It was moved that the Medical Society appoint a committee to study the care of indigents, especially on specialist's care, i.e., for operations, special treatments, etc. President appointed **Dr. A. Y. Wong,** chairman; **Dr. E. Tompkins, Dr. Ed. Underwood, Dr. Wm. Toney, Dr. A. L. Burden,** members, and **Dr. T. G. Luthrop,** advisor.

* * *

The regular meeting of the Maui County Medical Society was held at the Maui Grand Hotel on Tuesday, September 18, 1951, with **Dr. E. Shimokawa** presiding. Guests present were: **Major Maxwell D. Boyd, Colonel Boyen** of Tripler Army Hospital, and **Mr. Taff** of the Department of Health, Bureau of Statistics.

Major Boyd spoke on the possibility of Maui doctors examining Maui inductees to the Army. After much discussion, Maui doctors felt that as far as physical examination was concerned, the doctors were willing to do their share. It was understood that the laboratory work and clerical work would be supplied by the Army. **Colonel Boyen** spoke briefly to substantiate what Major Boyd had said previously. **Dr. Fleming** made a motion to do all the physical examinations for the inductees free of charge. Motion was seconded by **Dr. St. Sure** and unanimously carried.

EDWARD S. KUSHI, M.D.
Secretary

NOTES AND NEWS

PERSONALS

Dr. Angie Connor, acting chief of the Bureaus of Maternal and Child Health, and Crippled Children, of the Territorial Department of Health, left for a year's graduate study at the University of California. Dr. Connor will pursue further work in Public Health on a fellowship awarded by the National Foundation for Infantile Paralysis.

Dr. Joseph T. Y. Kam has announced the opening of his offices for the private practice in dermatology and syphilology. Dr. Kam was graduated from St. Louis College in 1932 and Santo Tomas Medical College in 1941. He received his graduate training at Lakeside University Hospital in Cleveland. Prior to his return to Honolulu, he was chief dermatologist and syphilologist at the Nanking Central Hospital, Nanking, China, and during the past year, assistant resident physician at Kalaupapa Settlement.

Dr. Joseph Palma of the Pediatric Department of The Clinic has returned from a short trip to the mainland. While away, Dr. Palma entered his daughter, Joan, at Kingswood School, Cranbrook, Michigan.

Back at his desk from a trip to Manila is **Dr. Charles Wilbar,** President of the Territorial Department of Health. Dr. Wilbar represented the U. S. as a technical observer at the meeting of the Western Pacific Region of the World Health Organization.

Dr. Edgar Childs, accompanied by his family, left for an extended study tour for Philadelphia. While away, Dr. Childs will take postgraduate work in roentgenology.

Continuing the practice of medicine at Dr. Childs' former office, but limiting himself to internal medicine, is **Dr. Chew Mung Lum.** Dr. Lum is a graduate of Northwestern University Medical School. He has had advanced training at Wesley Hospital and more recently at Queen's Hospital.

Dr. B. Allen Richardson has been appointed as part time medical consultant to the Department of Public Welfare.

Guest speakers at a recent meeting of the Honolulu Surgical Society were **Colonel L. K. Mantell,** Chief of the Urological Service; **Lt. Col. H. F. Bertram,** Assistant Chief of the Surgical Service, and **Major Benjamin Musser,** Chief Resident of the Surgical Service, of Tripler Army Hospital.

Also announcing the opening of an office for the general practice of medicine and surgery is **Dr. Edmund C. K. Lum.** Dr. Lum is a graduate of Northwestern University Medical School and served his internship at Cook County Hospital, Chicago.

Death has claimed three of Hawaii's kamaaina physicians:

Dr. Tai Heong Kong Li, Honolulu's first Chinese woman physician and wife of Dr. Khai Fai Li, died on August 11. Dr. Li, mother of **Dr. Min Hin Li, Dr. Elizabeth Li, Mrs. Richard Sia** and five other children had been in active practice for 33 years prior to her retirement in 1949.

Dr. Tokuo Takahashi, a long time Honolulu physician, died in Tokyo on September 5.

Dr. J. A. Morgan, distinguished Honolulu eye, ear, nose, and throat surgeon, passed away on September 25. Dr. Morgan had been in ill health for the past four years and was confined to his home for the past two years.

Our deepest sympathies to the families of our colleagues.

Dr. and Mrs. K. B. Chun are the parents of a son born August 22.

Dr. Alfred S. Hartwell addressed the Rotary Club of Honolulu. The title of his address was "A Heart to Heart Talk."

Dr. Matsuju Yamashiro returned from Okinawa after a 3 months' visit. As a representative of the Okinawa Medical Relief Society, Dr. Yamashiro and three other local Okinawan leaders took $15,000.00 worth of medical supplies to Okinawa.

Joining the local ophthalmo-oto-rhino-laryngologists is **Dr. Phillip W. H. Chock.** Dr. Chock is a graduate of Hilo High School, the University of Kansas and Rush Medical School. He interned at the Holy Cross and Cook County Hospitals and received his postgraduate training at the Illinois Eye and Ear Infirmary in Chicago. His new office is in the National Building, Honolulu.

Back from a postgraduate course at Margaret Hague Hospital for Women in New Jersey is **Dr. Lucy Mo Fong.**

Dr. Francis K. Chu has recently opened his office at Nuuanu Square Building. Dr. Chu, a pediatrician, graduated from Marquette University Medical School. He interned at St. Louis University Hospital and had a medical residency at Queen's. He received his advanced training at White Memorial, Los Angeles County General and Queen of Angels Hospitals, all in Los Angeles.

Dr. Stephen M. K. Hu, Chief of the Mosquito Control Bureau, has returned from the first worldwide conference on filariasis in Papeete, Tahiti. He also visited the Fiji Islands, and British Samoa.

Dr. Albert Lemes, dentist, was elected President of the Territorial Dental Society.

Dr. Harry L. Arnold, Jr., addressed the Engineering Association of Hawaii on the subject of socialized medicine.

Dr. Edwin Willett has been named plantation physician at the Hutchinson Sugar Plantation Company at Naalehu, Hawaii. Dr. Willett is a graduate of Punahou, Washington State College and George Washington University. He served his internship at the Naval Medical Centre, Bethesda, Maryland.

Dr. Hastings H. Walker, director of Leahi Hospital, celebrated his 27th year anniversary of service with the hospital. The occasion was coincidental with the dedication of a new million dollar unit at Leahi.

Kent W. Longnecker, popular and able administrator of Kapiolani Hospital, has accepted a position as Assistant Business Administrator of Leahi Hospital, beginning January 1, 1952. Mr. Longnecker is a graduate of the Hotel Administration course at Cornell University and the course for Hospital Administration at Northwestern University. He will be missed from Kapiolani, and his many friends wish him well in his new undertaking.

Hawaii

Not much News and Notes from Hawaii this time. I understand **Dr. Sam Brown** was on the mainland for about a week. Of course, he is back.

Dr. and Mrs. Archie Orenstein are vacationing on the mainland. They are expected back late in December. In the meantime, **Dr. M. A. Glover,** the only woman doctor on this island, is substituting for Dr. Orenstein.

Dr. Clyde Phillips is still on the mainland for his health. We all hope that he is better and will be back soon.

Oh yes, let me introduce **Dr. Edward Wong** who started his practice in pediatrics at 472 Kamehameha Ave., Hilo, Hawaii. He is a graduate of St. John's University, Shanghai, China in 1942. He served his internship at St. Luke's Hospital, Shanghai, China. To top it all, he was a prisoner of war from 1941 to 1944. He escaped from the Japanese in January, 1944, and joined the U. S. 14th Air Force until the termination of hostilities. He returned to the U. S. and took postgraduate studies in Pediatrics at the University of Pennsylvania. He served yearly residencies in Pediatrics at Sea View Hospital, N. Y., St. Vincent's Hospital, N. Y., and Children's Memorial Hospital in Chicago, Ill. He is single.

Maui

Dr. Edmund Tompkins, superintendent of Kula Sanatorium, attended the meeting of the American Hospital Association which met in St. Louis in September. He also spent some time visiting in Oregon, and returned home the latter part of October.

Dr. Lester Kashiwa recently left to assume a residency in Proctology at Jefferson Medical College Hospital in Philadelphia.

Dr. Vernon Jim and family, who left early in the summer, are now living in Chicago. Dr. Jim is taking a postgraduate course in ophthalmology at Billings Hospital in that city.

Dr. Harold Kushi recently spent three months in advanced ophthalmology study in Maine.

Dr. and Mrs. Joseph Ferkany of Kula visited relatives in Pittsburgh following the meeting of the American Surgical Association in Washington, D.C., which Dr. Ferkany attended.

UMI MAKAHIKI I HALA*

Dr. John Moorhead of New York City has accepted the invitation of the Honolulu County Medical Society to come to Hawaii for a series of postgraduate lectures on traumatology. He arrives on December 3. The lecture topics and dates will be publicized later.

Dr. Louis L. Buzaid is the new full-time radiologist at Queen's Hospital, and director of its X-ray Department. His services are available to all members of the staff for discussion of cases.

Dr. N. R. Sloan has been appointed to take **Dr. I. D. Hirschy's** place as resident physician in charge of Kalaupapa Leprosy Settlement, during the latter's leave of absence on the mainland. Dr. Sloan has been assisting Dr. Hischy since last July, and has recently been licensed to practice medicine in the Territory.

Dr. and Mrs. Ralph B. Cloward recently announced the birth of their second daughter, Karen. Dr. Cloward has left by Clipper for Los Angeles to attend the meeting of the American Academy of Neurological Surgery, to which he was recently elected.

The entire Territory was recently honored in the person of **Dr. F. J. Pinkerton** by his election to the Vice-presidency of the American Academy of Ophthalmology and Otolaryngology.

Dr. O. E. Jeffreys has left Honolulu and is at present in Los Angeles.

Dr. Fred Irwin, retired, has been with the Hawaii Medical Service Association for the past year as medical director, and has been doing an excellent piece of work.

Our first exchange subscription is with *Pennsylvania Medical Journal.* Dr. Donaldson, the Editor, writes: "Wishing the Hawaii Medical Journal great success and its editorial staff increasing satisfaction with the results of their labors, we hasten to add your 'baby' to our Exchange list."

Since the report on Medical Preparedness published in the first number of the JOURNAL, several interesting developments have occurred. One was the decision of the Major Disaster Council to appoint **Dr. H. L. Arnold** as a member of the Executive Committee of the Council in charge of first aid units and ambulance service. He selected as his advisory committee, the Preparedness Committee elected by the Honolulu County Medical Society, and as his executive officer, **Dr. Robert Faus,** now a Major in the Medical Corps of the Army. The Disaster Council at the same time decided that the program for hospital expansion and possible evacuation should be turned over to Dr. Thomas Mossman. The hygiene and sanitation program, including inoculation and other preventive measures, is in the hands of **Dr. M. F. Haralson** of the Board of Health.

Dr. Harry Arnold, Jr. leaves by Clipper in December to attend the meeting of the American Academy of Dermatology and Syphilology in New York. He will take the American Board examination and return on December 22, also by Clipper.

Dr. H. M. Johnson is instructor at the University of Hawaii to the nurses taking the Public Health Nursing course. His lectures deal with the methods, diagnosis and treatment of syphilis and other venereal diseases.

Blood Plasma Bank: Letter from the Public Health Committee of the Chamber was read, requesting expression from the Medical Society if in its opinion "the blood plasma bank might reasonably be expected to be an important factor in the conservation of the health of the port" and if so would "200 flasks form an adequate basic supply."

It was the consensus that the blood plasma bank is an important factor as stated above and that 200 flasks should be regarded as only a beginning. The Secretary was instructed to so advise the Public Health Department.

* Ten years ago.

Hawaii Cancer Society

Authentic information about cancer is being brought to the public weekly in "Hawaii Health Review," a 15-minute program presented over KHON every Monday from 7:30 to 7:45 p.m.

The program is sponsored by the Hawaiian Surgical Supply Co., a subsidiary of the Hawaiian Gas Products, Ltd., and is produced by the Hawaii Cancer Society in cooperation with the Territorial Medical Association and the Territorial Department of Health. It is conducted by Alan G. Slipper, manager of the surgical supply company.

It was started about the first of June with a program in which several representatives of the cooperating agencies took part. Since then it has featured a series of informal interviews with doctors and others who specialize in the cancer field.

Areas covered thus far in the programs have included the seven danger signals as set forth by the American Cancer Society, as well as symptoms and other information concerning cancer of the skin, digestive tract, lung, female genital tract, breast, nose and throat.

The public is invited to send in questions to be answered on the program.

Urology Award—The American Urological Association offers an annual award of $1000.00 (first prize of $500.00, second prize $300.00 and third prize $200.00) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been in such specific practice for not more than five years and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Chalfonte-Haddon Hall, Atlantic City, New Jersey, June 23-26, 1952.

For full particulars write the Secretary, Dr. Charles H. de T. Shivers, Boardwalk National Arcade Building, Atlantic City, New Jersey. Essays must be in his hands before February 15, 1952.

Award for Outstanding Research in the Field of Infertility

The American Society for the Study of Sterility announces the opening of the 1952 contest for the most outstanding contribution to the subject of infertility and sterility. The winner will receive a cash award of one thousand dollars, and the essay will appear on the program of the 1952 meeting of the Society. Essays submitted in this competition must be received not later than March 1, 1952. For full particulars concerning requirements of this competition, address The American Society for the Study of Sterility, 20 Magnolia Terrace, Springfield, Massachusetts.

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PRESENT DAY CUSTOMS RELATING TO CHILDBIRTH AND INFANT CARE AMONG HAWAIIANS

ALISON MacBRIDE*

Many of the customs of old Hawaii concerning childbirth and infant care stand up well in the light of modern knowledge of what constitutes good maternity care. However, discussions with living Hawaiians indicate that much has been forgotten and that only a few of the protective tabus and practices of old Polynesia guide the mother and child of today. In this paper, an attempt is made to assess the extent to which certain customs prevail and influence Hawaiian families in their reaction to childbirth.

While many of the protective elements in the old culture have been forgotten, Hawaiian families have not generally embraced modern hospital and medical care as acceptable substitutes. Hawaiian babies have a higher mortality rate during the first year of life than do infants of other racial origins in the Territory. The Hawaiian mother more often than not elects to have her delivery at home, assisted by friends and family rather than by physician or midwife.

There are about 200 so-called "informant" deliveries each year in the Territory and three quarters of them are deliveries of Hawaiian mothers. In 1949, only 166 Hawaiian infants were born, and since the largest proportion of informant deliveries are among Hawaiians, it is reasonably safe to assume that only a few Hawaiian mothers and infants receive the benefits of modern science for one of life's most critical events.

Sociologists remind us that cultural transition is a slow and gradual process, more particularly with an independent and intelligent people like the Hawaiian. He continues to live in the environmental matrix of his heritage out of which custom evolved. Quite different is the case of people of other racial origins in Hawaii, who voluntarily transplanted themselves and because of that have been more ready to abandon their cultural ways and substitute elements of the new culture they came to live within.

In order to ascertain to what extent the old practices relating to childbirth and the care of the infant persist, opinions were sought from ten Hawaiians of varying background, most of whom were mothers. The size of the sample does not justify generalizations, and the following findings are presented only as cursory impressions gained by the interviewer about some of the forces which are influencing our modern Hawaiians.

The ancient Hawaiian theory of nature regarded all phenomena as psychophysical. Deep seated illness and abnormalities were ascribed to psychic conditions and causes. These malevolent influences often came from outside the sufferer and might result from concentrated spite, hate or jealousy in the heart of another, or the condition might be the result of possession by a ghostly demon spirit who had escaped from its keeper. Pregnancy had status, and was considered to be vulnerable to such psychic genera, particularly jealousy. Consequently, the fact of pregnancy was a carefully guarded secret.

* Assistant Chief, Bureau of Public Health Nursing, Department of Health.

There are several indications that these theories still prevail, with all the implications possible for mother and child. Pregnancy is not spoken of freely and is kept within the bosom of the family for fear of another's jealousy. A woman has to be careful not to eat a food which in the form of a bird, fish or animal represents her guardian spirit or angel, lest protection be withdrawn. Ti leaves worn next to the skin are believed to ward off evil. It is common practice of Hawaiian friends and relatives to gather for prayer to release a woman who has complications at childbirth. Screaming is regarded as a sign of possession. Excessive labor pains, which may be due to an evil cause from without, will be transferred by these prayers to a proxy—another woman who is glad to help her laboring sister.

In keeping with this psychic theory, the vestigial remains of an ancient purification ceremony are sometimes practiced. This ritual drives out any lingering malevolent influence from the mother just before the infant is born. A *kahuna* person or elder presides and receives the woman's confessional, then a suckling pig or garden-variety chicken is sacrificed.

Another related custom is found in the observance of the ancient tabu on sewing or knitting or lei wearing during pregnancy lest the infant be strangled by the umbilical cord.

In old Hawaii, the mother's diet was strictly regulated from the fourth month on: no hot spicy foods or too many salty foods were allowed. Greens of various kinds (*popolo, luau*, etc.) and mild medicinal herbs were advocated to build up the body of the child. These greens were high in vitamins, iron and calcium and are recognized nutritional requirements for health today. Some Hawaiians add seaweed to the diet in extra amounts in the last trimester and the tabu on spicy foods is observed which is a sensible way to avoid digestive discomfort. The Hawaiian diet today leaves much to be desired from the standpoint of nutrition during pregnancy, however. Fruits, vegetables and milk intake is low, and since rice is supplanting poi to an undesirable extent, the diet is often deficient in calcium as well as vitamins A and C. In respect to her diet, the modern Hawaiian mother lacks the protection which the ancient dietary tabus provided to the pregnancy.

On a lighter side some of the most delightful imagery is contained in the ancient folklore surrounding food cravings. It was believed that the disposition, health and behavior of the child were determined in utero and could be predicted by these cravings: if the mother craved a *pilii* (bivalve which clings to a rock) the child will have a very affectionate nature and only death itself will part him from loved ones; if she craved a *manini* (fish which hides in recesses of coral reef) he will be shy; if *luau* (taro tops) he will answer questions only by nodding his head like the swaying of the taro leaf. Sex could be determined by asking the mother for her hand which if extended palm up meant the child would be a girl, and if palm down the child would be a boy.

Modern science still has no light to throw on the reasons for capriciousness in food habits during pregnancy and the modern Hawaiian does not subscribe to the theory that these cravings predict personality characteristics. Only one story was elicited in support of this ancient folklore: only after one mother observed her wriggling son did she remember she had craved a sea urchin early in pregnancy! However, the pregnant woman is still apt to have an oldtimer ask her for her hand and thereupon learn the sex of her child.

The ancient concept that parental behavior during pregnancy will affect the nature of the child finds corroboration in modern epidemiologic concepts in the field of mental hygiene. Ancient and modern Hawaiians believe that if parents are lazy, their offspring will be lazy and poor providers, so the Hawaiian mother is apt to be busier than usual during pregnancy. The family behavior pattern is recognized today as generic to personality development.

The old *kahuna* used postural exercises and *lomi-lomi* to make delivery easier. The expectant mother still employs the massage skills of her mother or a relative expert in *lomi-lomi* in the last trimester to reach the same goal—strong muscles to facilitate delivery. The grandmother-masseuse is continuously observant of the infant's position and manipulates the abdomen manually to assure a vertex presentation. It is interesting to note the recent emphasis in obstetrical practice to include exercises and relaxation regimes as a part of prenatal care.

In some cases even today relatives gather for the birth of the child. The mother is encouraged to walk to and fro and when the pains become more intense, she takes a kneeling position with her knees apart. A relative places his knees on her back and when the child is born grasps her around the waist and exerts pressure on the fundus; another relative supports her in front, knee to knee and hand to hand. This squatting position is still preferred by many women. It is the natural position in many cultures and the common prac-

tice of insisting that a woman deliver in bed is contrary to primitive, instinctual dictates.*

After the birth, the mother was given a warm broth and herbs to help her fill the empty feeling (*hakahaka*) and to expel excessive blood. Different kahunas had their own preferences as to herbs. Various herbs crushed in water are given today; the one most frequently mentioned was the ashes of guava stumps. When tearing has occurred, a pad saturated with *olena* (ginger), *alae* (red dirt), salt and water seems to have remarkable healing effects. The Hawaiian believes it is bad to wet the umbilical stump, and keeps it dry, using *pia* (starch) to correct bleeding.

The old folklore prescribed caution in the disposition of after-birth and navel cord (*piko*). These are considered to be extensions of the child who will be affected if they fall into the wrong hands: if a rat eats *piko* the child will be a chronic thief. The after-birth was washed well to avoid the child having sore eyes; then it was buried deep, and a tree planted over it which could not be cut down as long as the child lived. Many stories were told in which the after-birth or miscarriage products were thrown into the ocean and became a family guardian spirit in animal form. Similarly the after-birth is protected today by deep burial and the place often kept a secret.

In Haleole's romance of *Laiei Kawai,* the old grandfather who saves the life of the twin sister, wears her navel cord around his neck to keep it from harm. On each island there were designated places of safety for the disposal of *piko,* for example, at Honomalino landing in South Kona there is a rock of legendary interest which appears above the surface at low tide; in the old days anxious parents, seeking the welfare of their offspring were wont to travel some distance to secrete *piko* in a hole in this rock which was then sealed by a smaller stone.

Preservation of *piko* is still regarded as an important charge upon parents or guardian of the child until it can be disposed of safely. Many a Hawaiian home has these treasures stored in a bottle or metal powder box.

It was the old custom that the first son would be reared by paternal grandparents and the first daughter reared by maternal grandparents. If these parents were dead, the relative next in seniority line assumed responsibility for these children. The presumptive guardian always was present and assisted with the birth. There continues to be social pressure exerted upon parents to give up first born children to grandparents; however, the mothers who were interviewed had been successful in repudiating the claims of grandparents to their offspring.

The Hawaiian baby's first solid food was mashed sweet potato. At six months, poi was given and a little later, the soft parts of the limpet, vegetables and meat broths were added. By the end of the first year mixed herbs were given, mashed *kukui* nuts, crab juice and vegetables. When an infant required medicinal herbs, the mother chewed these and mouth-to-mouth feeding was administered,

The modern one-year-old is customarily given a slightly different variety of foods, but the dietary principles are similar; in addition to his mother's milk (or that of a wet nurse) foods rich in minerals, vitamins and protein are added, poi is still the most important supplement to milk.

Hawaiian mothers and grandmothers carry along the old belief in the value of massaging and stroking the infant's head and extremities, particularly the fingers, to develop a well formed body. Swathing the infant in tight binding cloth to keep back and legs straight was not resorted to as in many European cultures. It is not an uncommon sight to observe mothers stroking their children purposefully and in a manner not observed among other racial groups in the islands.

Hawaiians did not express any fear of hospitals or medical care, rather an indifference toward them. The modern Hawaiian frequently combines the old therapeutic practice with the modern when she is under the care of a medical doctor.

Another potent force working against modern hospital and medical care in the Hawaiian community is the tales of individuals' unfortunate experiences with professional personnel. These stories are told and retold whenever the problem of hospitalization arises. That this force is a particularly potent one cannot be doubted when one remembers that the Hawaiians had no written language and history and tradition was and is handed down by the spoken word generation to generation through meles and storytelling. This fact of community life provides a chain reaction effect for each hospital experience of a Hawaiian whose pride and sensibilities have been trammelled wittingly or unwittingly by an insensitive nurse, doctor or other hospital worker.

* Vaughn, K., *British Medical Journal,* January 1950.

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Refresher Course, Summer 1951*

NEW DRUGS

M. E. BERK, M.D.

Of the new drugs which have become available in the postwar years many have been very successful and some have not been of any real value.

Anti-ulcer drugs: The one which has stimulated the greatest furor is Banthine; this drug works by inhibiting the formation of gastric juices which include free hydrochloride. Other additions to the anti-ulcer regimen are resins; these work by a chemical combination with the acid instead of a neutralizing process such as most people are familiar with.

Peripheral vascular disease: Many new drugs have come out in this field. Basically, they all tend to work by sympathetic paralysis, that is, causing a marked dilatation of the blood vessels supplying the peripheral muscles. Such drugs are: Myanesin, which is better known in this country under the trade-names of Tolserol and Ornixon. Other drugs are: Priscoline, Dibennamine, and Tetraethylammonium.

Insulins: In addition to plain insulin, crystalline insulin, and protamine zinc insulin, there have been two additions. One was added before the war and is known as globin insulin. It is a long-acting insulin which usually lasts about 24 hours. Its peak of activity is at 8 hours. The newest and most popular long-acting insulin is NPH5O. It is an almost neutral solution of plain insulin with protamine zinc insulin and acts very much the same as a 2 to 1 mixture of plain and protamine zinc insulin. Its peak of activity is between 12 and 14 hours.

Cardiac drugs: The two most important additions in this field, besides the various glycosides of digitalis, are: Procaine amide which goes under the name of Pronestyl commercially. It is particularly useful in ventricular arrhythmias, although recent work indicates it may be of value early in the treatment of auricular arrhythmias. Another addition has been the cation resins; these are given to cardiacs in failure and to any other patient whose body tissues are loaded with sodium ion. The cation resins do not remove the sodium, which is retained in the tissues, but they do tend to prevent absorption of the daily sodium intake, providing too large an intake is not permitted. There are also several new mercurial diuretics on the market. The greatest advantage to these is that the more recent ones can be given intramuscularly or subcutaneously without any undesirable effect.

Antibiotics: The most important ones are: Penicillin, streptomycin, aureomycin, chloramphenicol, neomycin, and bacitracin. These cover a wide spread of bacterial organisms and in the instance of aureomycin and chloramphenicol the rickettsial diseases are also included. Streptomycin and dihydrostreptomycin are useful in the Gram negative organisms, such as E-coli, and streptomycin itself is now found in common usage for the treatment of active tuberculosis. Bacitracin, which is one of the most potent of the autibiotics, is still too toxic to be given intramuscularly or intravenously, but it can be used in ointment form for tropical application.

PARENTERAL FLUID ADMINISTRATION

T. H. MAEDA, M.D.

One of the greatest advances in modern medicine has been the development of the technic of maintaining fluid and electrolyte balance in patients unable to take oral foods and fluids. It must be remembered that the best method of giving simple fluids is by mouth unless definite indications for parenteral therapy exist.

A. INDICATIONS:
1. Maintenance of fluid and electrolyte balance in patients unable to take fluids by mouth.
2. In considerations where the parenteral route is preferable to the oral route, as
   a. Prevention of postoperative distention, or
   b. In treatment of acute diarrheas where parenteral routes rest the gastrointestinal tract in addition to supplying needed fluids and electrolytes.
3. Nutrition—Considerable quantities of aminoacids and glucose can be given parenterally and thus supply a large part of the nitrogen and caloric requirement.
4. Restoration of blood and plasma volume with blood or blood substitutes.
5. Administration of drugs not absorbed or tolerated by mouth, i.e. penicillin.
6. Intravenous anesthesia, i.e. pentothal sodium.

B. IMPORTANT CONSIDERATIONS in fluid and electrolyte balance are:
1. The average adult having an operation or illness requiring hospitalization needs an intake of at least 2,500 to 3,000 cc. of fluid per day to keep his urinary output above 1,000 cc.
2. All forms of abnormal losses via sweating, diarrhea, drainage, etc., must be estimated or measured. Replacement of these losses with plain saline solution was formerly recommended, but recently 0.5% saline made isotonic with glucose has been suggested. This change has been recommended, especially postoperatively, because of salt intolerance.
3. Unless abnormal losses are present, an intake of 9-10 gms. of salt in both diet and fluid is ample for the average person. Additional amounts may cause salt retention, especially if renal damage is present.

The Medical Group

* Sponsored by Curriculum Committee of Hawaii League of Nursing Education.

4. Blood and plasma losses must be estimated and, if excessive, be replaced by blood or plasma substitutes—not simple fluids. The latter aid if no blood or blood substitutes are available.
5. Persons in congestive or so-called right-sided heart failure should be given parenteral fluids only if absolutely necessary and then slowly without salt in the fluids or diet. Even small amounts of salt in their diet may accentuate edema.
6. Patients with impending pulmonary edema or so-called left-sided heart failure (hypertensives, coronary artery disease) should be given parenteral fluids very slowly and plasma substitutes very sparingly since it seems to be the increase in blood volume that precipitates pulmonary edema. It is better to give too little salt to these patients than too much.
7. Renal patients present problems in fluid and electrolyte balance too complicated to consider here. Therapy is directed at trying to return abnormal chemical findings toward normal without introducing too much sodium ion.

C. Methods of Administration

1. Hypodermoclysis—This method is not used often now.
   (a) *Indications:*
      (1) Where fluid need is not acute.
      (2) In patients with poor circulation to prevent overloading.
      (3) Where there is no local infection of the thighs.
      (4) After prolonged intravenous therapy when the available veins are thrombosed.
   (b) *Contraindications:*
      (1) Usually unsatisfactory in patients whose serum proteins are so low or in whom the heart is so damaged that the fluid will not be absorbed.
      (2) Only relatively isotonic, non-irritating solutions, such as physiologic saline or a 3 per cent solution of glucose in saline, can be given. Distilled water should never be given under the skin.
   (c) *Technic:*
      Hypodermoclysis may be given into the thighs, the abdomen, or the axillae. The preference is for the thighs. The patient lies flat in bed with the knees elevated on a pillow. The anterior or lateral aspects of the thighs are prepared with alcohol and are draped with sterile towels. The inner aspect of the thigh is more acutely sensitive to pain than the anterior or the outer aspect. If the air is not removed from the tubing, it may block the flow of fluid, or if it enters the tissues, it may cause a harmless but often perplexing subcutaneous emphysema. With the left hand the skin of the thigh is pinched between the thumb and fingers and is gently elevated from its normal position so as to separate it from the fascia and to insure that the needle will not be introduced deep into the fascia. The needle is held parallel to the thigh and is introduced into the subcutaneous tissue. Gauze is placed beneath the hilt of the needle, wrapped over it, and held in place with adhesive strips.
   (d) *Precautions:*
      (1) The skin should not balloon out—needles are too superficial if it does.
      (2) The needle should not be left in place more than 4 hrs. If properly inserted 2,000 or more cc. of fluid can often be administered in this time.
      (3) The infusion can be given by an experienced nurse.
   (e) *Solutions* which may be used are:
      (1) Isotonic solutions, such as 5% glucose in water, 2½% glucose in 0.45% sodium chloride, and 1/6 molar sodium lactate.
      (2) Wydase (Lyophilized Hyaluronidase by Wyeth) may be used for speedy absorption of fluids in hypodermoclysis. It prevents pain from stretching of tissue. It is nontoxic and apparently nonallergenic.
      (3) For only pain relief, 30 cc. of 1% Novocain in 1,000 cc. of solution may be used.
2. Intravenous Infusion: This is the most commonly used method.
   (a) *Advantages:*
      (1) The speed of infusion may be easily changed.
      (2) It is the best means of giving blood and blood substitutes.
      (3) Some drugs can be given only in this way.
      (4) If the needle is carefully inserted in a forearm vein, the patient is quite comfortable.
   (b) *Disadvantages:*
      (1) Possible circulatory embarrassment.
      (2) Thrombophlebitis.
      (3) Technical disadvantages of venipuncture and of keeping infusion going.
   (c) *Indications:*
      (1) Rapid absorption is desired.
      (2) When the fluid cannot be taken by mouth and is too irritating to the tissue to be given by hypodermoclysis.
      (3) When the amount of parenteral fluid to be given is so great that it could not be efficiently absorbed by hypodermoclysis. The intravenous administration of fluid entails the danger of inducing a reaction, but fluids given intravenously certainly cause less discomfort than those given under the skin.
   (d) *Contra-indications:* Fluids should not be given intravenously or should be given slowly and in small amounts:
      (1) In the presence of cardiac decompensation, or
      (2) In patients with myocardial damage.
   (e) *Equipment for Venoclysis:*
      (1) Murphy drip and stopcock to regulate rate of flow.
      (2) 20 gauge needle.
      (3) Tourniquet.
      (4) Antiseptics and sterile gauze for preparation of skin.
      (5) Adhesive tape to strap needle in place.
      (6) Standard to hold flask.
   (f) *Technic:*
      (1) *Selection of vein*—The median cubital or the Pasilic veins are usually selected for

venipuncture. Slapping the skin and massaging the arm will sometimes make the veins stand out more prominently. If the veins of the arms are not satisfactory, as is often the case in obese patients, the veins of the legs, or even the external jugular vein may be used in infants.

The superficial cutaneous veins, which are visible on the hands and on the feet, are thin-walled, are not supported by areolar tissue, and tend to roll off the point of the needle. A deep vein, if it is palpable, is easier to hit than a clearly visible superficial cutaneous vein. This is particularly true with respect to veins of the feet. The thin-walled, movable, cutaneous veins are often more difficult to use than the less conspicuous anterior malleolar vein. The location of the anterior malleolar vein is so constant that a needle often can be inserted into it even when the vein is neither visible nor palpable. In a patient whose arms and legs have been burned or when no other vein can be found, it is usually possible to insert a needle into the femoral vein just below Poupart's ligament. The pulsation of the femoral artery is palpated, and the needle is then introduced medially, vertically, or at a slightly oblique angle. In an emergency, fluids or medication can be given by this route, but the possibility of producing a thrombosis of this important vein must always be considered.

(2) *Eliminating air from tubing*—Before fluids are given intravenously, all air should be removed from the tubing. Bubbles of air are usually visible through the thin plastic tube, but both the tubing and the needle should be raised above the level of the flask so that any air bubbles may be forced back into the Murphy drip; the remaining air bubbles to escape by way of the needle ahead of the solution. A small amount of air, even if it is given directly into a vein, will do no harm, but a tube full of air, if given rapidly, could conceivably result in air embolism.

(3) *Application of tourniquet* — A tourniquet should be applied in such a way as to distend the veins. If it is applied too tightly, the arterial blood supply will be shut off, and the veins will not be distended. As soon as the needle is in the vein, the tourniquet should be removed lest the increased venous pressure result in extravasation.

(4) *Introduction of needle*—The point of the needle is inserted through the skin with the bevel upward and parallel and lateral to the vein so that the impetus of the needle, after it has traversed the skin, does not carry it on through the walls of the vein. The needle is then introduced into the vein at an oblique angle. Blood escapes from the vein into the needle and should be seen in the glass connector at the end of the tubing. The tourniquet is removed, the stopcock is released, and the fluid is allowed to flow.

Either an 18 or 20 gauge needle is used for intravenous therapy. It should be sharp, and the bevel should be short. A long bevel is apt to perforate the opposite side of the vessel and cause an extravasation of blood.

(5) *Immobilizing the needle*—A small piece of cotton or gauze is placed beneath the glass adapter to hold the needle in the vein at about a 30 degree angle. The needle is fixed in this position by strips of adhesive tape ½ inch wide, placed across the end of the needle and the glass adapter.

(6) *Rate of flow* — Under ordinary circumstances, fluid should not be given at a rate to exceed 1 liter in two hours, which is approximately 120 drops per minute.

(g) *Common errors and complications of intravenous therapy.*

(1) *Failure of fluids to flow*—If the needle is apparently in the vein and the solution still fails to flow, it is possible that:

(a) The tourniquet has not been removed.
(b) The vein is thrombosed.
(c) The point of the needle is resting too firmly against the wall of the vein.
(d) The needle is plugged.

(2) *Extravasation of fluid*—The most common complication associated with the intravenous administration of fluid is extravasation of the fluid into the tissues. This complication should cause no concern when isotonic saline or dilute solutions of glucose are used, but when hypertonic saline or glucose or acids or alkaline solutions extravasate in the tissues, a slough may follow. As soon as the complication is discovered, the needle should be withdrawn, and the affected part massaged to disperse the fluid as rapidly as possible. Thrombosis of the veins becomes troublesome after repeated venoclysis. The greatest intimal reaction occurs at the point at which the needle is inserted. If repeated venipuncture is contemplated, the site of the venipuncture should be varied in order to reduce the incidence of thrombosis. The intravenous solution should be kept running slowly all the time lest the wall of the vein collapse, agglutinate, and block the flow of fluid.

(3) *Chills and fever*—The cause of chills and fever after intravenous administration of fluids is not clearly understood. Although improper sterilization of solutions and cleansing of apparatus may be responsible for some reactions, other factors, including the too rapid administration of the fluids, appear to play a part. The reactions may be alarming but in the absence of other complications are rarely fatal. If serious hyperthermia occurs, the patient should be packed in ice until the temperature is under control. Most reactions are caused by tubing rather than by the solution.

(h) *Cutdown technic:* The indications are (1) any time it is desirous to give intravenous fluids rapidly and (2) the available arm and leg veins are not able to be located, are collapsed due to shock, or are thrombosed from previous technic. This procedure will not be used by a nurse, therefore further explanation will not be made.

National Building.

WHAT IS YOUR "FUNCTIONS" DOLLAR BUYING?

You will be interested to know that the dollar you contributed this year to the ANA for studies of nursing functions has already gone into action. The first five grants have been made under the five-year one million dollar research program.

The first grant is for $10,000 to the California State Nurses' Association toward a study to determine current nursing practices of professional nurses, practical nurses and auxiliary nursing workers. The findings should answer some of our questions as to proper distribution of functions among all types of nursing personnel.

The Boston Psychopathic Hospital has received a grant of $12,860 for the first year of a two-year study to investigate the effect on mentally ill patients of changes in patient population, normal daily events, changes in number and in type of nursing personnel, and changes in social functioning of personnel.

To the Charles T. Miller Hospital in St. Paul, Minnesota, goes a grant of $1,756 for a one-month activity study of all nursing personnel in the hospital.

Purposes of the other two grants are less specifically designated but are to the New York Conference Committee for the Improvement of Patient Care, $5,000, and to the Rhode Island State Nurses' Association, $1,756.

L.A.D.

FIRE AT PRACTICAL NURSE TRAINING QUARTERS

The building of the Practical Nurse Training School at 916 Pensacola Street was almost completely destroyed by fire of undetermined origin on the night of September 10. The equipment of the home management room, including chairs upholstered by former students, as well as gifts from the alumnae association and some gifts from graduating classes, was entirely lost.

Many books, much bed linen, all mattresses, and pillows were burned. However, soap and water with plenty of elbow grease has restored to use many articles so charred and sooty that they at first appeared beyond salvage.

A new location on the McKinley campus and near the site of the old building is being renovated by the City and County. In the meantime classes are being conducted at the Convalescent Nursing Home, Leahi Hospital classroom, and in the one remaining room of the bungalow.

The address and telephone number (5-2349) of the school remain the same.

Kauai Notes

The annual May and August Rummage and Plant sales of the Kauai Nurses' Association were highly successful. The proceeds are awarded annually to two Nursing scholarship students. Two of our scholarship students are enrolled in the St. Francis Hospital School of Nursing. They are Miss Yupemia Padilla, second year student, and Miss Edith Takashiro, pre-clinical student. Another scholarship student, Miss Hiroko Kakoda, is with The Queen's Hospital School of Nursing.

Miss Ruth Imai, public health nurse, Lihue district, was recently married to Dr. E. Masunaga of Hanapepe.

Miss Alice Tanaka, public health nurse, Waimea district, left August 25 for postgraduate work at the University of Oklahoma.

Wilcox Hospital: Recent newcomers to the nursing staff include Miss Dale Ibata, graduate St. Francis Hospital School of Nursing, and Misses Alice Iwamoto, Fukiko Izawa, Mildred Mukai and Harumi Kudaishi, all of whom are graduates of The Queen's Hospital School of Nursing.

FACULTY CHANGES AT THE QUEEN'S HOSPITAL SCHOOL OF NURSING

Mrs. Rosie K. Chang, R.N., M.A., Educational Director. (Former Assistant Director of Nursing.)

Miss Mildred Asato, R.N., B.S., Clinical Coordinator. (Former Clinical Instructor.)

Miss Kathryn Fox, R.N., B.S., Nursing Arts Instructor. (Former Clinical Instructor.)

Mrs. Violet Matson Larson, R.N., B.S., Clinical Instructor. (Bethseda Hospital School of Nursing, St. Paul, Minnesota; University of Minnesota, Minneapolis, Minnesota.)

Miss Ruth Shinn, R.N., B.S., Clinical Instructor. (The Queen's Hospital School of Nursing, Honolulu, T. H.; University of Rochester, Rochester, New York.)

Miss Mary Tolles, R.N., B.S., Clinical Instructor. (St. Joseph Mercy College of Nursing, Sioux City, Iowa; Briarcliff College, Sioux City, Iowa.)

St. Francis Hospital

Miss Karen Tanaka and Miss Vivian Zane both graduates of the School of Nursing, left early in September to matriculate at the University of Dayton, Dayton, Ohio. Both are studying for Bachelor of Science degrees in Nursing Education.

Miss Betty Ito, a 1949 graduate of the School of Nursing, received the nurse scholarship award from the Japanese Junior Chamber of Commerce this year. She is matriculating at Columbia University in order to complete work for a bachelor's degree.

Sister Laurine, well known to the nurses in the Territory, returned to Hawaii in August after having completed work for a B.S. in nursing education degree at the Catholic University of America. She replaced Miss Karen Tanaka as instructor in nursing arts.

Sister Maureen arrived in Honolulu in September to become an assistant to Sister Jolenta, Administrator. Sister Maureen is a graduate of St. Joseph's Hospital School of Nursing in Syracuse, New York. She received her B.S. in Nursing Education degree from the Catholic University of America, and has begun work on her master's degree.

Twelve of the twenty-six students who were graduated from the School of Nursing in August, accepted

positions on the nursing staff of their alma mater. They are the Misses Esther Aranio, Emiliana Daniel, Rosario Dela Cruz, Dorothy Karakawa, Hazel Morada, Naomi Nakatsukasa, Laraine Tamashiro, Ethel Kawakami, Peggy Watanabe, May Lau, Mrs. Conchita Andres Leavy and Mrs. Hope Chow Fong. Other new general staff nurses are Miss Ruth Rogers, graduate of Royal Jubilee Hospital School of Nursing, Victoria, Canada; Miss Gene Garas, graduate of The Queen's Hospital School of Nursing; Miss Shirley Benoit, graduate of St. Boniface Hospital School of Nursing, Manitoba, Canada, and Miss Delores Ritter, graduate of St. Alexius Hospital School of Nursing, Bismarck, North Dakota.

Whenever you change your address, please be sure to notify

Mrs. Grace Page, Office Secretary
Nurses' Association, Territory of Hawaii
Mabel Smyth Building
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Kauai:

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Staff Nurse, $235.

For further information contact the Department of Counseling and Placement Service of the Nurses' Association, Territory of Hawaii, Mabel Smyth Building.

MUSIC, CHERUBS AND BLUEBIRDS

SISTER LAURINE*

It began so long ago, these hobbies of mine; therefore I'm wondering if you would be interested. Being a poor Franciscan limits my collection somewhat—expenses you know.

However, records head the list. All sorts of them! To this day, I have seventeen albums featuring the great works of Tschaikowsky (Swan Lake Suite), Rogers and Hammerstein (South Pacific and Oklahoma), Friml (Red Mill), and a host of others. Of course, there are discs of Crosby's love for Hawaii, Alfred Newman's "Clair de Lune," and Vaughn Monroe's "Riders in the Sky." The taste for selections normally varies with the mood.

Then comes statuettes—of cherubs, that is. Fat ones, sleepy ones, cheery ones, angels of all shapes and forms adorn the office book rack and window sill. What price poverty! These gifts of china and clay range from $2.50 to $10.00. Yet friends are so kind.

Lastly, the hobby I cherish above all others is the collection of bluebirds. (Not live ones, to be sure.) Having once been called a "bluebird," I've always wanted to live up to such a nice name. For the bluebird is symbolic of happiness.

* St. Francis Hospital School of Nursing instructor in Nursing Arts.

An Advertisement of G. D. Searle & Co.

(The Council on Pharmacy and Chemistry of the American Medical Association has adopted the following statement of Actions and Uses and of Dosage for publication in connection with a description of Banthine Bromide for inclusion in New and Nonofficial Remedies)

METHANTHELINE BROMIDE.—*Banthine® Bromide (Searle)*

β-diethylmethylaminoethyl 9-xanthenecarboxylate bromide

Actions and Uses.—Methantheline bromide, a parasympatholytic agent, produces both the peripheral action of anticholinergic drugs such as atropine and the ganglionic blocking action of drugs such as tetraethylammonium chloride. Tolerated amounts of methantheline bromide exert side effects typical of atropine-like drugs, but cause less tachycardia, and also less postural hypotension than does tetraethylammonium chloride. Toxic doses produce a curare-like action at the somatic neuromuscular junction.

Clinical studies indicate that the drug effectively inhibits motility of the gastrointestinal and genitourinary tracts and, to a variable degree, diminishes the volume of perspiration and salivary, gastric and pancreatic secretions. It also decreases mucoprotein secretion. Like atropine, it produces mydriasis and cycloplegia when applied locally to the eye or administered systemically, but until more clinical evidence becomes available, its local use for this purpose is not recommended. The value of the drug for preventing abnormal cardiac reflexes through the vagus during thoracic surgery, or as an agent for routine preoperative medication in place of atropine, requires further investigation before final conclusions can be reached.

Methantheline bromide is indicated for clinical use whenever anticholinergic spasmolytic action is desired, provided it is not contraindicated because of its atropine-like characteristics or because of a patient's intolerance to the unavoidable side effects of such therapy. It is useful as an adjunct in the management of peptic ulcer, chronic hypertrophic gastritis, certain less specific forms of gastritis, pylorospasm, hyperemesis gravidarum, biliary dyskinesia, acute and chronic pancreatitis, hypermotility of the small intestine not associated with organic change, ileostomies, spastic colon (mucous colitis, irritable bowel), diverticulitis, ureteral and urinary bladder spasm, hyperhidrosis or control of normal sweating which aggravates certain dermatoses, and control of salivation.

Methantheline bromide produces some degree of cycloplegia and mydriasis in therapeutic doses and therefore should not be administered to patients with glaucoma. It sometimes decreases the ability to read fine print. Xerostomia (dryness of the mouth) is a common, sometimes transient, side effect. Urinary retention of varying degree may occur in elderly male patients with prostatic hypertrophy, and some patients may have difficulty emptying the rectum. Patients with edematous duodenal ulceration may experience nausea and vomiting during initial administration of the drug. These patients should take only liquids during the institution of drug therapy. All patients should be advised of the possible occurrence of side effects. Overdosage sufficient to produce a curare-like action may be counteracted by prompt subcutaneous injection of 2 mg. of neostigmine methylsulfate.

Dosage.—Methantheline bromide is administered orally or parenterally by either the intramuscular or intravenous route. Parenteral administration is not advised for patients able to take the drug orally. The average initial adult dose, oral or parenteral, is 50 mg. For patients with considerable intolerance, 25 mg. may be employed. In the management of peptic ulcer, a beginning schedule of 50 mg. three times daily before meals and 100 to 150 mg. on retiring is suggested. However, the usual effective dose is 100 mg. four times daily, although some patients may require more or less than this amount. The dosage may be increased to tolerance, using dryness of the mouth as a guide, and adjusted to meet the individual response of patients. Maintenance dosage in peptic ulcer is usually considered to be about one-half the therapeutic level. In the management of other hypermotile or hypersecretory states, the dosage should be adjusted to the smallest amount which will relieve the symptoms. When spastic conditions are secondary to inflammatory or other organic lesions, therapy directed toward the cause should be employed whenever possible.

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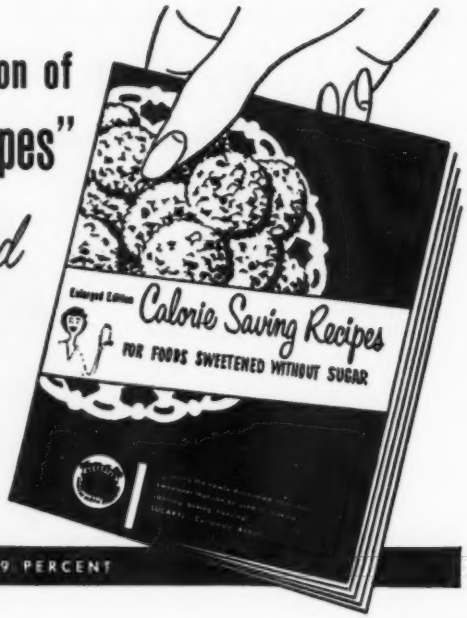

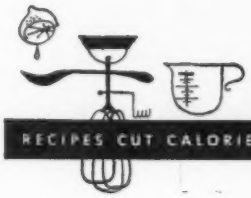

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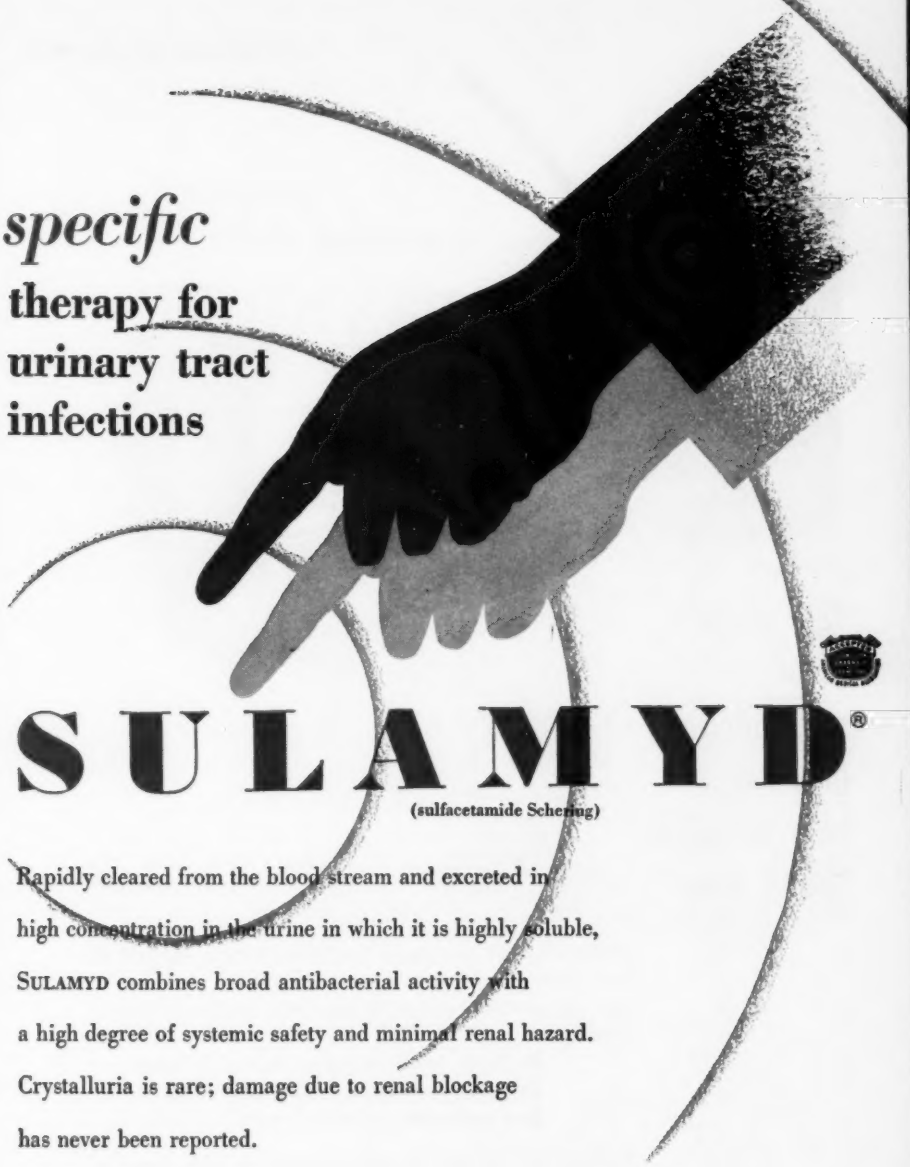

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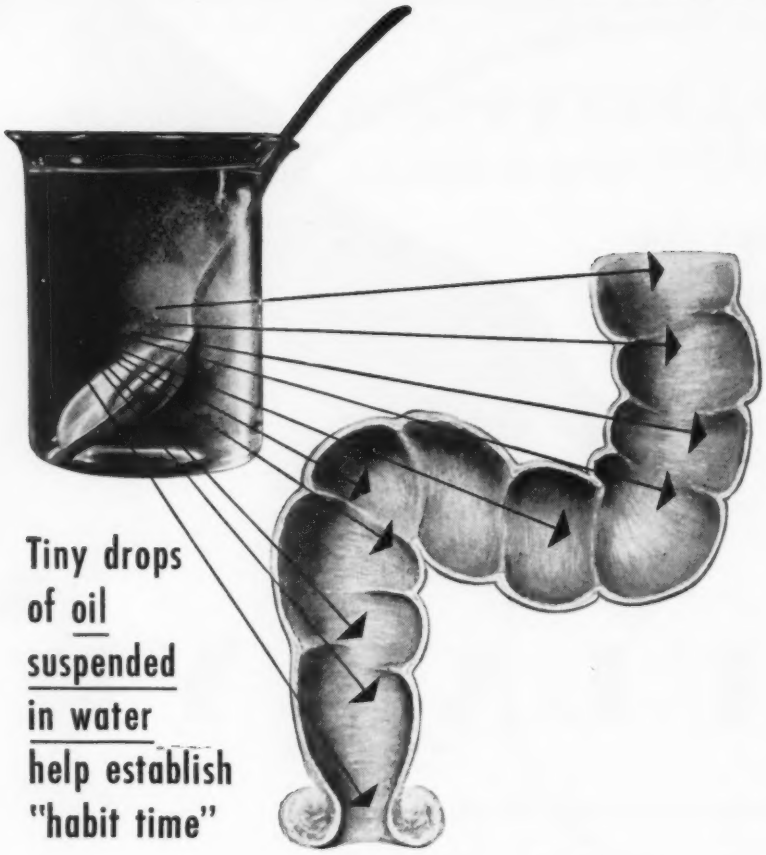
Rapidly cleared from the blood stream and excreted in high concentration in the urine in which it is highly soluble, SULAMYD combines broad antibacterial activity with a high degree of systemic safety and minimal renal hazard. Crystalluria is rare; damage due to renal blockage has never been reported.

Available in 0.5 Gm. tablets.

Schering CORPORATION · BLOOMFIELD, NEW JERSEY

SULAMYD

SCHERING



Tiny drops of oil suspended in water help establish "habit time"

PETROGALAR provides a moderate intake of mineral oil in the form of a water-miscible suspension.

This oil-in-water combination permeates the fecal residue to produce:

- Gentle lubricant action, without "leakage"
- Soft, nonirritating, easily passed stools
- Comfortable bowel movement

PETROGALAR may be taken alone or in milk, water or fruit juices—with which it is readily miscible.

PETROGALAR®

Aqueous Suspension of Mineral Oil, Wyeth

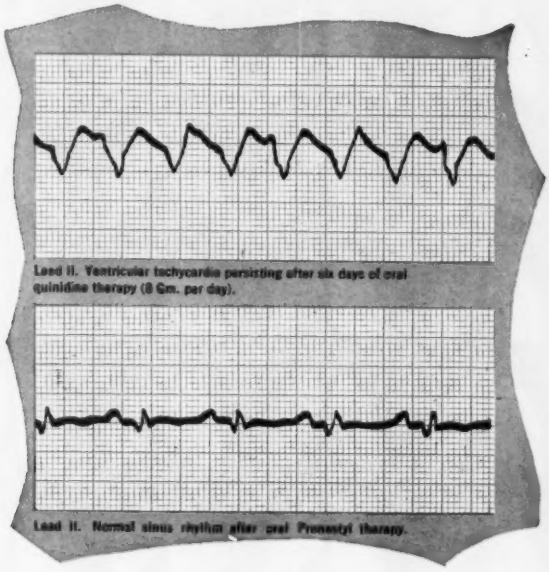
Wyeth

Wyeth Incorporated, Philadelphia 2, Pa.

a new drug . . .
for the treatment of ventricular arrhythmias

PRONESTYL *Hydrochloride*

Squibb Procaine Amide Hydrochloride



Lead II. Ventricular tachycardia persisting after six days of oral quinidine therapy (8 Gm. per day).

Lead II. Normal sinus rhythm after oral Pronestyl therapy.

Oral administration of Pronestyl is indicated in ventricular tachycardia and runs of ventricular extrasystoles. Intravenous administration is sometimes used in ventricular tachycardia and to correct ventricular arrhythmias during anesthesia. For detailed information on dosage and administration, write for literature or ask your Squibb Professional Service Representative.

PRONESTYL IS A TRADEMARK OF E. R. SQUIBB & SONS

Pronestyl Hydrochloride Capsules, 0.25 Gm., bottles of 100 and 1000.
Pronestyl Hydrochloride Solution, 100 mg. per cc., 10 cc. vials.

SQUIBB MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858.

reducing

pulmonary embolism

"No case of post-operative death from pulmonary embolism occurred in a study of heparinization during a 9-year period in a hospital with 80,000 admissions. With early diagnosis, early anticoagulation and heparin treatment of thrombo-embolic complications was reduced from 10 per cent in a control series to 0.9 per cent.[1] Such advances in the control of thrombo-embolic phenomena have been made possible by the pioneering efforts of investigators in many centers of medical research.

Upjohn research has contributed new and advanced preparations. A single, deep, subcutaneous injection of Depo-Heparin (30,000 to 40,000 U.S.P. units—approximately 300 to 400 mg.) "will give a lengthened coagulation time of 2 to 4 times normal for about 24 hours."[2]

For injectable and prolonged therapeutic control

R Depo-Heparin

Each cc. contains: Heparin Sodium ..... 20,000 U.S.P. units
(Approximately 200 mg.)
Gelfoam ..... 25 mg.
Dextrose, Anhydrous ..... 50 mg.
Water for Injection ..... q.s.
Preserved with sodium ethyl mercurithiosalicylate 1:10,000
Supplied with sterile disposable 1 cc. syringe, 25 gauge

1. Beer, Sidney: New York State Journal of Medicine, Volume 49, No. 2, Pt. 2, 1949.
2. Jorpes, Erik: Acta Medica Scandinavica, Volume 117, Supplement 140, 1944.

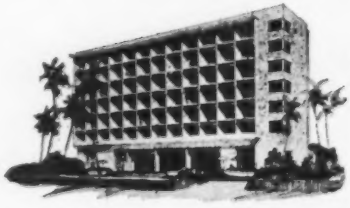
Upjohn

for medicine . . . Products with care . . . Designed for health

THE SurfRider

A heritage from Old Hawaii becomes a symbol of modern hospitality

In January Waikiki's newest hotel, the $1,250,000 seven-story SurfRider, will open its doors. For residents and visitors alike it is an important landmark. Using local supplies and services wherever possible, it has created new jobs at home. Most important, the SurfRider means more travel trade income for all the islands. As the surfrider is a proud symbol of Hawaii's outdoor pastimes, with this hotel Matson hopes to make the name an equally proud symbol of island hospitality.



THE SURFRIDER

☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆ ☆

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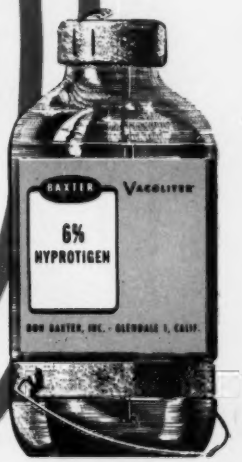
6% HYPROTIGEN®
represents more protein per liter than any of the 3 leading protein hydrolyzates for parenteral use ...yet Hyprotigen costs no more



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DON BAXTER, INC.
Research and Production Laboratories
Glendale 1, California

In addition to the usual rigid tests, each lot of Hyprotigen is subjected to clinical tests before release.

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Even in America today, surveys of certain groups have revealed a disturbing incidence of rickets.

Physicians realize the danger of this ever-lurking shadow, and the need for *regular, reliable protection.*

They know, too, that for most patients this protection must be economical.

That is why, *for seventeen years,* they have written so many millions of prescriptions for Mead's Oleum Percomorphum.

No other vitamin product has ever had such a background of clinical evidence.

And rarely does the physician have such *assurance* at the tip of his pen.